



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

August 22, 1995

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

RE: ENGINEER CERTIFICATION FOR PHASE II ALAMEDA CENTER NORTH
(C18-D22) CERTIFICATION STATEMENT DATED 8/9/95.

Dear Mr. MacKenzie:

Based on the information provided on your August 10, 1995
submittal, Engineer Certification for the above referenced site
is acceptable. The Certificate of Occupancy will not be issued
until we receive confirmation from State Highway Department and
City Inspection for the connection to the back of catchbasins.

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

Sincerely,

Bernie J. Montoya, CE
Engineering Associate

BJM/dl

c: Andrew Garcia
File

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Alameda Center North ZONE ATLAS/DRNG, FILE# (C-18)/1122
 DRB #: 94-411 EPC #: _____ WORK ORDER #: _____
 LEGAL DESCRIPTION: _____
 CITY ADDRESS: _____

ENGINEERING FIRM: D. Mark Goodwin CONTACT: John MacKenzie
 ADDRESS: Box 90606 PHONE: 345-2010
 OWNER: _____ CONTACT: _____
 ADDRESS: _____ PHONE: _____
 ARCHITECT: DCSW CONTACT: Marc Schiff
 ADDRESS: _____ PHONE: 8439639
 SURVEYOR: _____ CONTACT: _____
 ADDRESS: _____ PHONE: _____
 CONTRACTOR: S&J CONTACT: Ron McCormick
 ADDRESS: _____ PHONE: 884-6234

TYPE OF SUBMITTAL:

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

PRE-DESIGN MEETING:

____ YES
 ____ NO
 ____ COPY PROVIDED

Phase III

EverReady Oil

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
X CERTIFICATION OF OCCUPANCY APPROVAL
 ____ GRADING PERMIT APPROVAL
 ____ PAVING PERMIT APPROVAL
 ____ S.A.D. DRAINAGE REPORT
 ____ DRAINAGE REQUIREMENTS
 ____ OTHER _____ (Specify)

DATE SUBMITTED: 7/11/96

BY: John M. MacKenzie

JUL 11 1996



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

July 27, 1995

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

RE: ENGINEER CERTIFICATION FOR PHASE II ALAMEDA CENTER NORTH
(C18-D22) CERTIFICATION STATEMENT DATED 7/19/95.

Dear Mr. MacKenzie:

Based on the information provided on your July 20, 1995
submittal, Engineer Certification for the above referenced site
is not acceptable.

It is highly recommended that you make a field visit to the site
and determine what has not been completed and what has changed
from the original approved plan. I recommend, also, that on
future certification submittals that you follow the Engineer
Certification checklist from the D.P.M. closely. You may also
want to review Phase I again.

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

Sincerely,

Bernie J. Montoya, CE
Engineering Associate

BJM/dl

c: Andrew Garcia
File

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Alameda Center North ZONE ATLAS/DRNG, FILE# (C-18/D-22)
DRB #: 94-411 EPC #: _____ WORK ORDER #: _____
LEGAL DESCRIPTION: _____
CITY ADDRESS: _____

ENGINEERING FIRM: D. Mark Goodwin CONTACT: John MacKenzie
ADDRESS: Box 90606 PHONE: 345-2010
OWNER: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
ARCHITECT: DCSW CONTACT: Marc Schiff
ADDRESS: _____ PHONE: 8439639
SURVEYOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

____ DRAINAGE REPORT
X DRAINAGE PLAN
____ CONCEPTUAL GRADING & DRAINAGE PLAN
X 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
X BUILDING PERMIT APPROVAL
____ CERTIFICATION OF OCCUPANCY APPROVAL
____ GRADING PERMIT APPROVAL
____ PAVING PERMIT APPROVAL
____ S.A.D. DRAINAGE REPORT
____ DRAINAGE REQUIREMENTS
____ OTHER _____ (Specify)

DATE SUBMITTED: 10/3/94

BY: John M. MacKenzie

OCT 3 1994



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

June 21, 1995

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

RE: ENGINEER CERTIFICATION FOR BURGER KING @ ALAMEDA CENTER
NORTH (C18-D22) ENGINEER'S STATEMENT DATED 6/13/95.

Dear Mr. MacKenzie:

Based on the information provided on your June 14, 1995
submittal, Engineer Certification for the above referenced site
is acceptable.

The Certificate of Occupancy will not be released until our
office receives concurrence from the sidewalk inspector for
approval of the connections to the back of the existing catch
basins.

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

Sincerely,

Bernie J. Montoya, CE
Engineering Associate

BJM/dl

c: Andrew Garcia

File



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

P.O. BOX 90606, ALBUQUERQUE, NM 87199
(505) 345-2010

June 14, 1995

*Mr. Bernie Montoya
Hydrology Division
City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87103*

Re: *Alameda Center North (C-18/D-22)*

Dear Mr. Montoya:

This submittal of the Engineer's Certification for C.O. on the referenced project is for the Burger King restaurant only.

From a hydrology standpoint, it is important to understand that the Burger King stands alone and is able to function independent of the other adjacent sites now under construction.

If I can be of further assistance, please contact me.

Sincerely,

MARK GOODWIN & ASSOCIATES, P.A.

A handwritten signature in black ink, reading 'John M. MacKenzie'. The signature is written in a cursive, flowing style.

John M. MacKenzie, P.E.

JMM/smr

JUN 14 1995

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Alameda Center North ZONE ATLAS/DRNG, FILE# (C-18/D-22)
DRB #: 94-411 EPC #: _____ WORK ORDER #: _____
LEGAL DESCRIPTION: _____
CITY ADDRESS: _____

ENGINEERING FIRM: D. Mark Goodwin CONTACT: John MacKenzie
ADDRESS: Box 90606 PHONE: 345-2010
OWNER: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
ARCHITECT: DCSW CONTACT: Marc Schiff
ADDRESS: _____ PHONE: 8439639
SURVEYOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CONTRACTOR: S&J CONTACT: Ron McCormick
ADDRESS: _____ PHONE: 884-6234

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

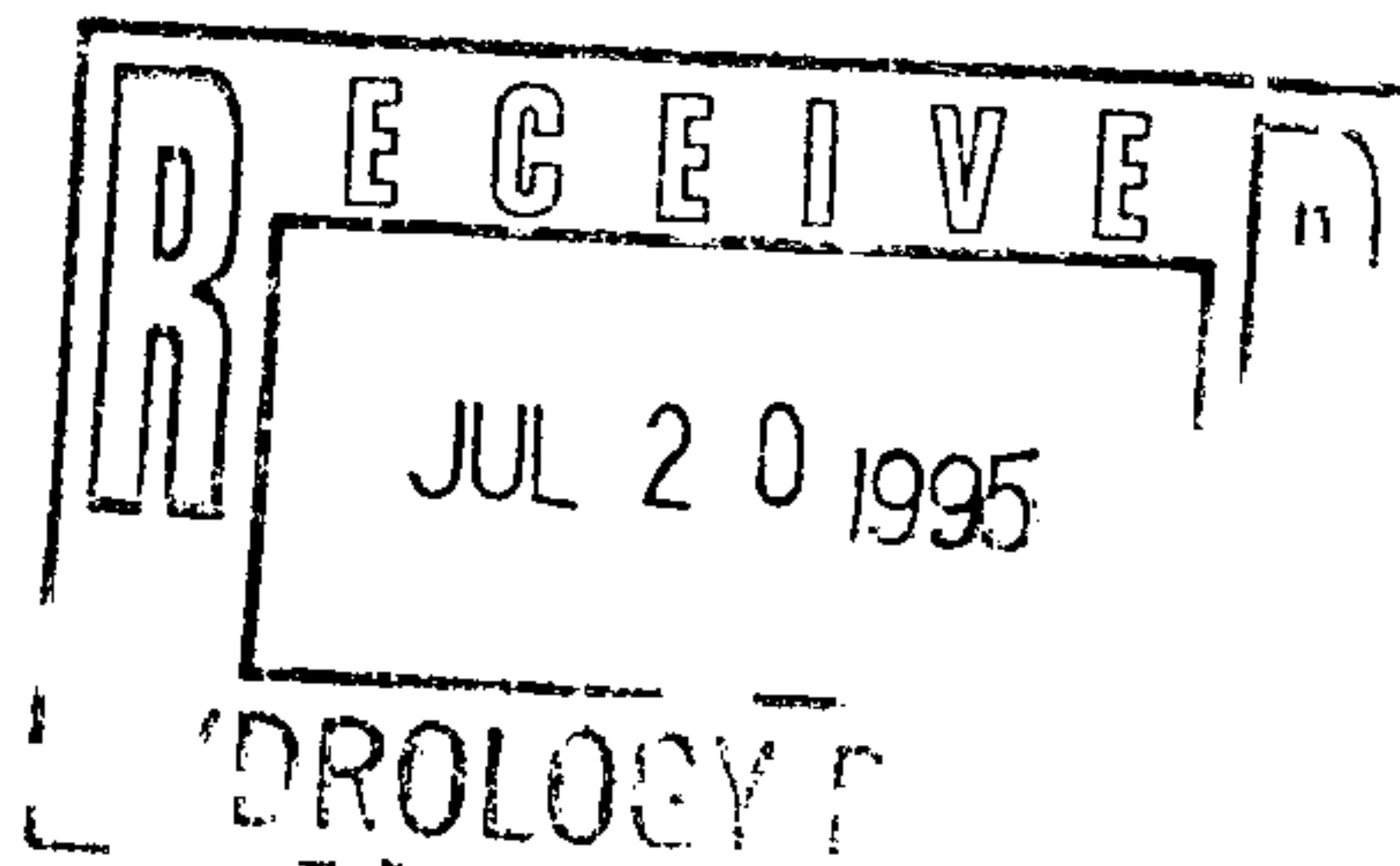
Phase II

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: 7/20/95

BY: John M. MacKenzie





City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

August 22, 1995

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

RE: ENGINEER CERTIFICATION FOR PHASE I ALAMEDA CENTER NORTH
(C18-D22) CERTIFICATION STATEMENT DATED 8/9/95.

Dear Mr. MacKenzie:

Based on the information provided on your August 10, 1995
submittal, Engineer Certification for the above referenced site
is acceptable. The Certificate of Occupancy will not be issued
until we receive confirmation from the State Highway Department
and City Inspection for the connection to the back of the
catchbasins.

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

Sincerely,

Bernie J. Montoya, CE
Engineering Associate

BJM/dl

c: Andrew Garcia
File

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Alameda Center North ZONE ATLAS/DRNG, FILE# (C-18/D-22)
 DRB #: 94-411 EPC #: _____ WORK ORDER #: _____
 LEGAL DESCRIPTION: _____
 CITY ADDRESS: _____

ENGINEERING FIRM: D. Mark Goodwin CONTACT: John MacKenzie
 ADDRESS: Box 90606 PHONE: 345-2010
 OWNER: _____ CONTACT: _____
 ADDRESS: _____ PHONE: _____
 ARCHITECT: DCSW CONTACT: Marc Schiff
 ADDRESS: _____ PHONE: 8439639
 SURVEYOR: _____ CONTACT: _____
 ADDRESS: _____ PHONE: _____
 CONTRACTOR: S&J CONTACT: Ron McCormick
 ADDRESS: _____ PHONE: 884-6234

TYPE OF SUBMITTAL:

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

PRE-DESIGN MEETING:

____ YES
 ____ NO
 ____ COPY PROVIDED

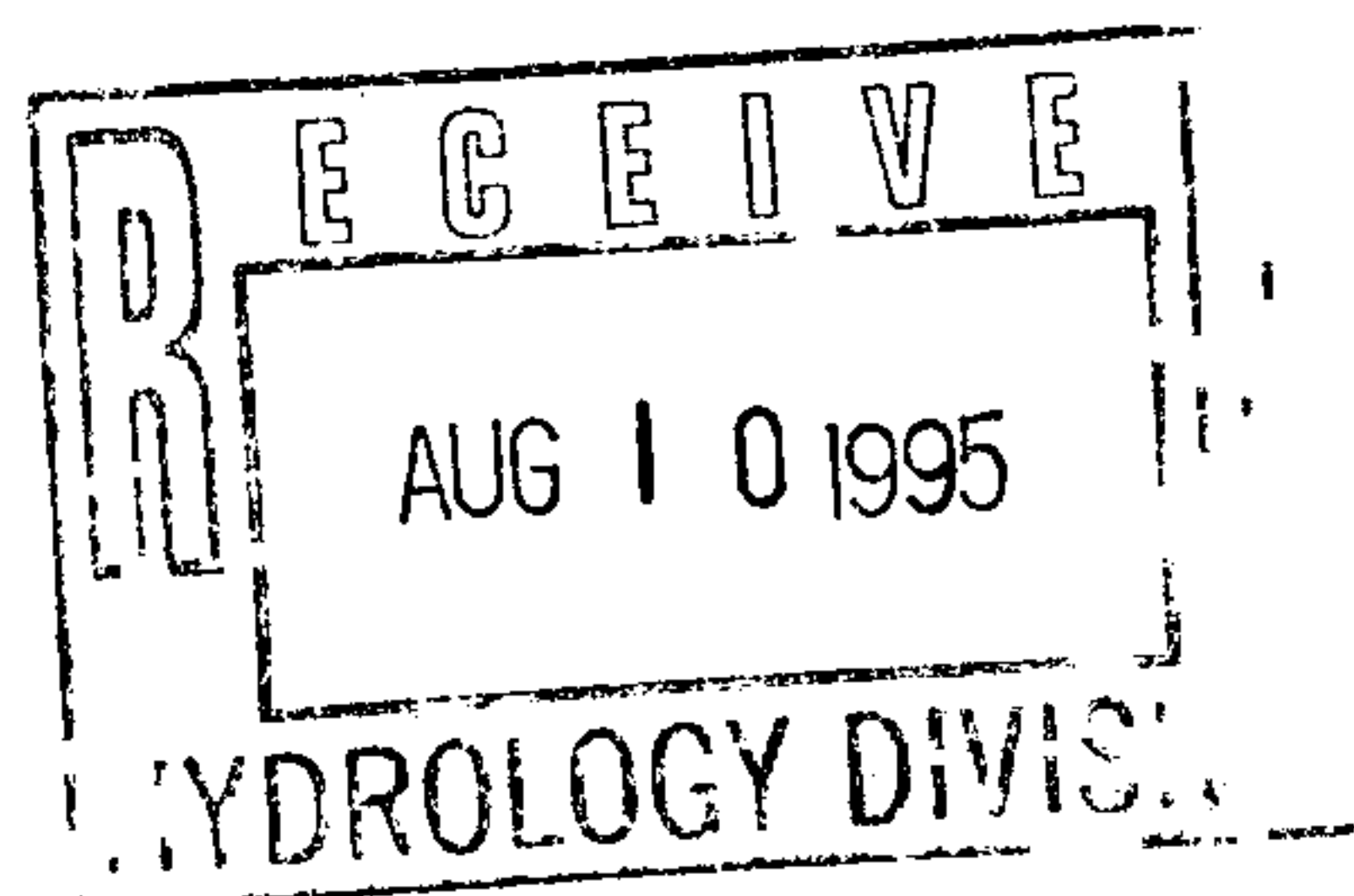
Phase II

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
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 ____ BUILDING PERMIT APPROVAL
X CERTIFICATION OF OCCUPANCY APPROVAL
 ____ GRADING PERMIT APPROVAL
 ____ PAVING PERMIT APPROVAL
 ____ S.A.D. DRAINAGE REPORT
 ____ DRAINAGE REQUIREMENTS
 ____ OTHER _____ (Specify)

DATE SUBMITTED: 8/10/95

BY: John M. MacKenzie





City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

October 13, 1994

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

RE: REVISED DRAINAGE PLAN FOR PHASE I ALAMEDA CENTER NORTH DEVELOPMENT
(C18-D22) ENGINEER'S STAMP DATED 10/3/94.

Dear Mr. MacKenzie:

Based on the information provided on your October 3, 1994 resubmittal, the above referenced site is approved for Building Permit.

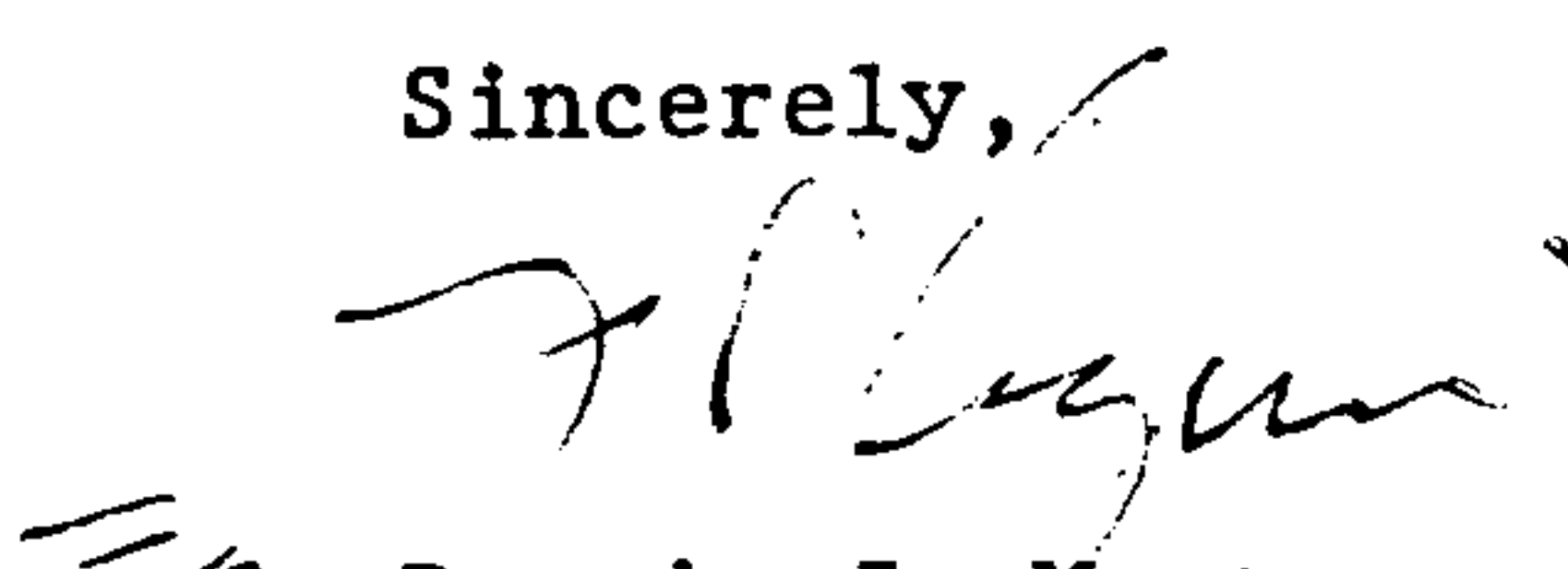
Please be advised that a separate permit is required for construction within City Right-of-Way. A copy of this approval letter must be on hand when applying for the excavation permit.

Also, prior to Certificate of Occupancy release, Engineer Certification per the D.P.M. Checklist will be required.

Please be advised that when the following phases will be permitted, a separate plan must be submitted indicating how the Phases will interact.

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/8644

c: Andrew Garcia
Arlene Portillo
cFile-



City of Albuquerque

P. O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103
PUBLIC WORKS DEPARTMENT

September 18, 1995.

CERTIFICATE OF WORK ORDER COMPLETION

S&J Enterprises, Inc.
3535 Princeton N.E.
Albuquerque, NM 87107

RE: ALAMEDA CENTER NORTH PROJECT NO. 5037.90, MAP NO. C-18

Dear Sir:

This is to certify that the City of Albuquerque accepts Project No. 5037.90 as being completed according to approved plans and construction specifications. Please be advised this certificate of completion and acceptance shall only become effective upon final plat approval and filing in the office of the Bernalillo County Clerk's Office.

The project is described as follows:

- Installation of 480 linear feet of 14" DIP waterline and 150 linear feet of 8" PVC waterline along the west and south frontages of the Alameda Center North development. Also installation of 390 linear feet of 6" PVC waterline on the westside of newly constructed north entrance. As a part of this waterline development, two 2" water service and two 6" waterline stubouts were installed at various locations.
- Extension of 460 linear feet of 8" PVC sanitary sewerline in Alameda Boulevard west of San Pedro Drive and installation of one 8" PVC sanitary sewer stubout on Signal Avenue.
- Construction of new roadway pavement on Alameda including median turnbay, driveway entrance to the and one catch basin.



historical rate. With the development of this site, the net impact on the existing storm drain system will be a significant decrease in the volume of sediment accepted (and less maintenance required).

On-site ponding will consist of 3 ponds: A, B & C. Ponds A and B will collect runoff from Drainage Basin A, while Pond C will collect runoff from Drainage Basin B and off-site Parcel A. Ponding Area A will discharge into Ponding Area B where it will be released at the historical rate for Drainage Basins A & B. Discharge from Ponding Area C will be released at the historical rate for Drainage Basin B and Parcel A.

Existing Conditions

	<u>Total On-site</u>	<u>Basin A</u>	<u>Basin B</u>	<u>Basin C</u>	<u>Parcel A</u>
Area	4.93 Ac	1.87 Ac	1.22 Ac.	1.84 Ac	2.42 Ac
Exist. Flow	9.46 cfs	3.59 cfs	2.34 cfs	3.53 cfs	4.65 cfs
Developed Flow	19.03 cfs	8.47 cfs	5.53 cfs	5.03 cfs	n/a

7 13
x 417
3 59
4 88

DRAINAGE INFORMATION SHEET

PROJECT TITLE: EveReady Oil / Alameda Center North ZONE ATLAS/DRNG, FILE#: C18-D22
DRB #: _____ EPC #: _____ WORK ORDER #: _____
LEGAL DESCRIPTION: Lot 22 D, Block 12, Tract , Unit B, NAA
CITY ADDRESS: _____

ENGINEERING FIRM: Mark Goodwin & Associates, PA CONTACT: John M. MacKenzie, PE
ADDRESS: PO Box 90606 PHONE: 345-2010
OWNER: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
ARCHITECT: Kevin Georges Architects CONTACT: Mark Eshelman
ADDRESS: 127 Jefferson NE PHONE: _____
SURVEYOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CONTRACTOR: _____ 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

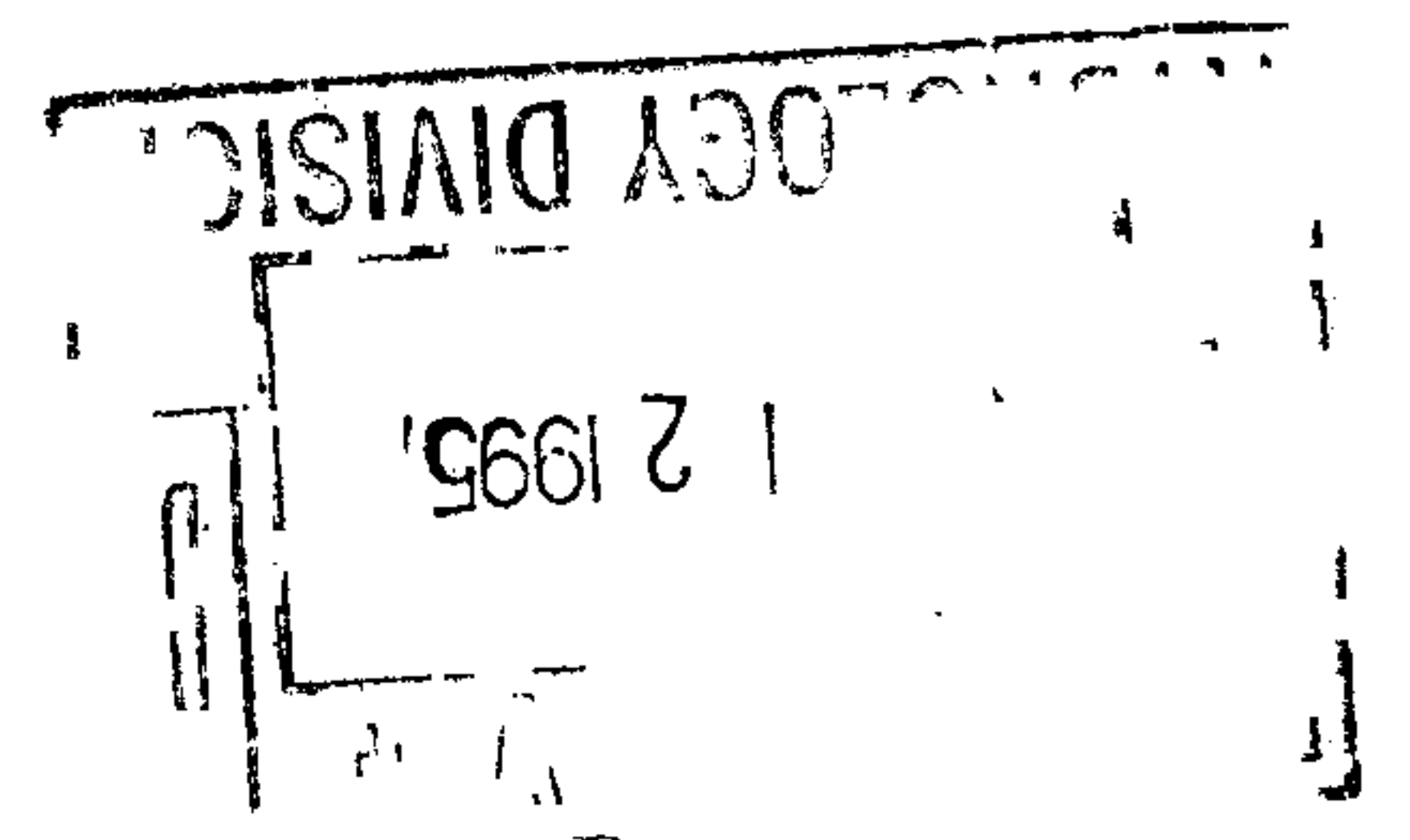
CHECK TYPE OF APPROVAL SOUGHT:

____ SKETCH PLAT APPROVAL
____ PRELIMINARY PLAT APPROVAL
____ S. DEV. PLAN FOR SUB'D APPROVAL
____ S. DEV. PLAN FOR BLDG PERMIT APPROVAL
____ SECTOR PLAN APPROVAL
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____ 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: 9/11/95

BY: _____

John M. MacKenzie, PE





D. Mark Goodwin & Associates, P.A.
Consulting Engineers and Surveyors
P.O. BOX 90606, ALBUQUERQUE, NM 87199
(505) 345-2010

11
11

September 1, 1994

Mr. Bernie Montoya
Hydrology Division
City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87199

**Re: ALAMEDA CENTER NORTH GRADING AND DRAINAGE PLAN FOR BUILDING PERMIT WITH
ENGINEER'S STAMP DATED 9/1/94, (C18-D22)**

Dear Mr. Montoya:

We have taken note of your comments issued on July 14, 1994 for the previously submitted conceptual grading and drainage plan covering this site. We now intend to address each comment accordingly.

1. The plan has been revised such that ponding is not closer than 15 feet to any structure proposed on site. The detention pond located along the east side of the south half of the site is positioned such that it will be no closer than 15 feet to any proposed off-site structure (the side yard setback is 10 feet).
2. The plan to use an off-site storm drain has been abandoned. Discharge into the storm drain will be surface, as it is now. The only difference is that the discharge will be relatively free of sediment. See discussion within computation sheets for a description.
3. A plan will be delivered to the Highway Department for their review and approval.
4. A copy of the plat with the cross-lot drainage statement (see note #6) has been included.
5. The site east of the main entrance road off of Alameda Boulevard will be developed at a later date. At that time, you will be receiving a site specific grading and drainage plan.
6. See discussion on computation sheets.
7. This plan consists of ponding depths of less than or equal to 18".
8. Pond spillway calculations are included.
9. See maintenance note on the plan. **covenant**
10. All details are now shown on the plan.
11. Erosion control has been identified on the plan.

SEP - 1 1994

Mr. Bernie Montoya
September 1, 1994
Page 2

12. *The 100-Year floodplain boundary has been included on the plan.*
13. *Berm compaction requirements have been identified on the plan.*
14. *It appears that the construction of the I-25 interchange has significantly altered the realistic boundary of this flood zone. Because a LOMR has not been completed for this resulting interchange construction, the attached plat (see note 9) has identified and drawn attention to the existing FEMA floodplain. Our grading and drainage plan also indicates the potential need for flood insurance to be obtained.*

If your past concerns need further attention, please contact me.

Sincerely,

MARK GOODWIN & ASSOCIATES, P.A.



John M. MacKenzie, P.E.

JMM/smr

Attachment

SEP - 1 1994



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

October 4, 1995

John MacKenzie
Mark Goodwin and Associates
P.O. Box 90606
Albuquerque, NM 87199

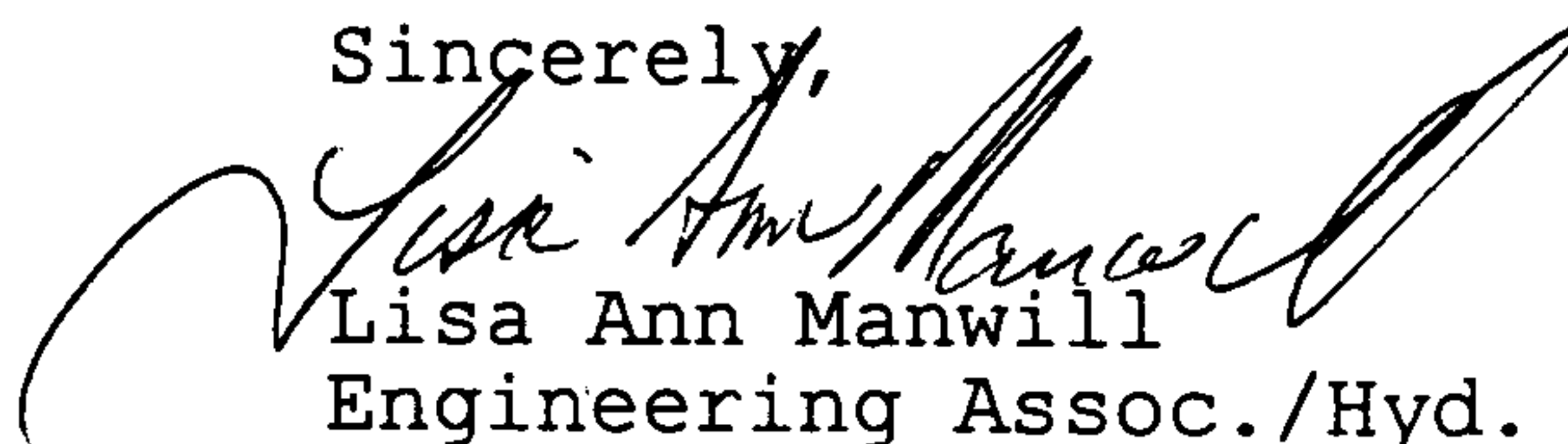
**RE: EVEREADY OIL/ ALAMEDA CENTER NORTH (C18-D22) ENGINEER'S
CERTIFICATION FOR CERTIFICATE OF OCCUPANCY APPROVAL.
ENGINEER'S CERTIFICATION DATED 9-28-95.**

Dear Mr. MacKenzie:

Based on the information provided on your submittal dated September 29, 1995, the above referenced project is approved for Certificate of Occupancy.

If I can be of further assistance, please feel free to contact me at 768-3622.

Sincerely,



Lisa Ann Manwill
Engineering Assoc./Hyd.

c: Andrew Garcia
File

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Alameda Center North ZONE ATLAS/DRNG, FILE# (C-18/D-22)
 DRB #: 94-411 EPC #: _____ WORK ORDER #: _____
 LEGAL DESCRIPTION: _____
 CITY ADDRESS: _____

ENGINEERING FIRM: D. Mark Goodwin CONTACT: John MacKenzie
 ADDRESS: Box 90606 PHONE: 345-2010
 OWNER: _____ CONTACT: _____
 ADDRESS: _____ PHONE: _____
 ARCHITECT: DCSW CONTACT: Marc Schiff
 ADDRESS: _____ PHONE: 8439639
 SURVEYOR: _____ CONTACT: _____
 ADDRESS: _____ PHONE: _____
 CONTRACTOR: S&J CONTACT: Ron McCormick
 ADDRESS: _____ PHONE: 884-6234

TYPE OF SUBMITTAL:

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

PRE-DESIGN MEETING:

____ YES
 ____ NO
 ____ COPY PROVIDED

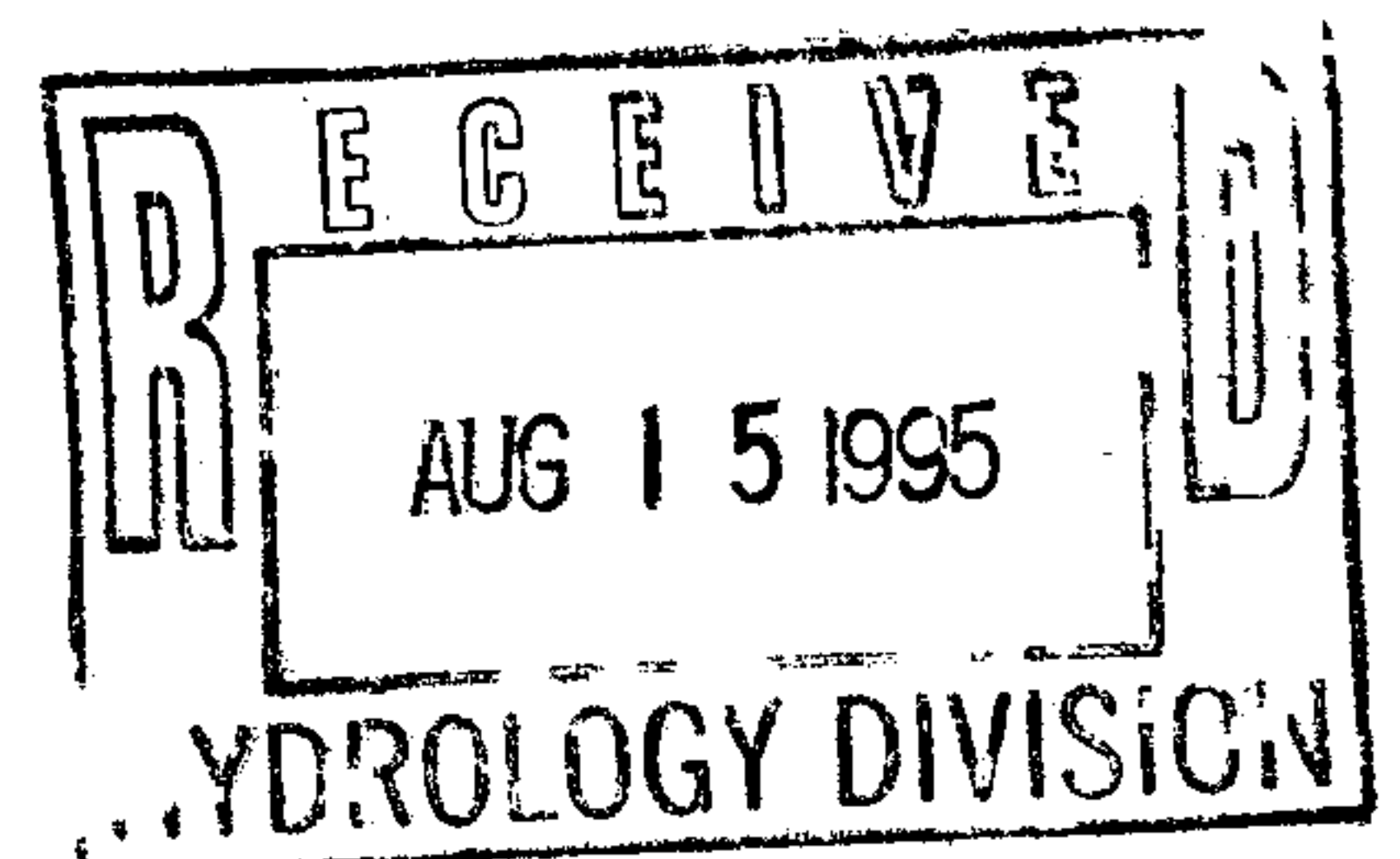
Phase I

CHECK TYPE OF APPROVAL SOUGHT:

____ SKETCH PLAT APPROVAL
 ____ PRELIMINARY PLAT APPROVAL
 ____ S. DEV. PLAN FOR SUB'D APPROVAL
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 ____ S.A.D. DRAINAGE REPORT
 ____ DRAINAGE REQUIREMENTS
 ____ OTHER _____ (Specify)

DATE SUBMITTED: 8/14/95

BY: John M. MacKenzie





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

P.O. BOX 90606, ALBUQUERQUE, NM 87199
(505) 345-2010

July 11, 1996

*Mr. Bernie Montoya
Hydrology Division
City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87103*

Re: Alameda Center North (C-18/D-22)

Dear Mr. Montoya:

This submittal of the Engineer's Certificate of C.O. on the referenced project is for the EverReady Oil Site.

As discussed earlier this morning, I am resubmitting the same as-built information previously submitted. Please review your files. There may be a separate EverReady Oil file.

If I can be of further assistance, please contact me.

Sincerely,

MARK GOODWIN & ASSOCIATES, P.A.

A handwritten signature in black ink that reads 'John M. MacKenzie'. The signature is written in a cursive style with a large, stylized 'J' and 'M'.

*John M. MacKenzie, P.E.
Project Manager*

JMM/sr

b:\eveready\co.ltr

r

JUL 11 1996



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

September 28, 1995

John MacKenzie
Mark Goowin & Associates
P.O. Box 90606
Albuquerque, NM 87199

RE: ENGINEER CERTIFICATION FOR EVERREADY OIL CO. (C18-D22)
CERTIFICATION STATEMENT DATED 9/8/95.

Dear Mr. MacKenzie:

Based on the information provided on your September 12, 1995
submittal, Engineer Certification for a 30 day temporary
Certificate of Occupancy is acceptable.

Please be advised that a submittal will be required for the
permanent Certificate of Occupancy.

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

Sincerely,

Bernie J. Montoya, CE
Engineering Associate

BJM/dl

c: Andrew Garcia
File



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

P.O. BOX 90606, ALBUQUERQUE, NM 87199
(505) 345-2010

September 9, 1995

Mr. Bernie Montoya, CE
Hydrology Department
City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87199

Re: Everready Oil Grading and Drainage Plan Engineer's Certification(C18-D22)

Dear Mr. Montoya:

As recently discussed with you over the phone, I am making this submittal with not all of the site as-built measures completed. The temporary de-silting area east of the referenced project will be worked on later this week.

At this stage we are seeking a temporary C.O. with the understanding that the contractor will completing the necessary work by the time this submittal reaches your desk and your review.

I urge you to contact me at that time so I can inform you of the final status of this out standing issue.

Sincerely,

MARK GOODWIN & ASSOCIATES, P.A.

A handwritten signature in cursive script, reading 'John M. MacKenzie'. The signature is written in dark ink and is positioned above the printed name.

John M. MacKenzie, P.E.

JMM/smr

SEP 12 1995



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

May 22, 1995

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

RE: REVISED DRAINAGE PLAN FOR EVER READY OIL/ALAMEDA CENTER
NORTH (C18-D22) ENGINEER'S STAMP DATED 5/15/95.

Dear Mr. MacKenzie:

Based on the information provided on your May 15, 1995 resubmittal, attached you will find some concerns that will need to be addressed prior to final approval.

If you have any questions, please do not hesitate to contact me at 768-2667.

Sincerely,

Bernie J. Montoya, CE
Engineering Associate

BJM/dl

c: Andrew Garcia
File

DRAINAGE INFORMATION SHEET

C-18/022

PROJECT TITLE: Alameda Center North ZONE ATLAS/DRNG, FILE#: C-18-Z
DRB #: _____ EPC #: Z-94-87 WORK ORDER #: _____
LEGAL DESCRIPTION: Lots 12-16, 22-24 Block 12, North Albuq. Acres, Tract A Unit B
CITY ADDRESS: _____

ENGINEERING FIRM: Mark Goodwin & Associates, PA CONTACT: John M. MacKenzie
ADDRESS: PO Box 90606 PHONE: 345-2010
OWNER: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
ARCHITECT: Design Collaborative SW CONTACT: Doug Heller
ADDRESS: 105 4th Street SE PHONE: 843-9639
SURVEYOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CONTRACTOR: _____ 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:

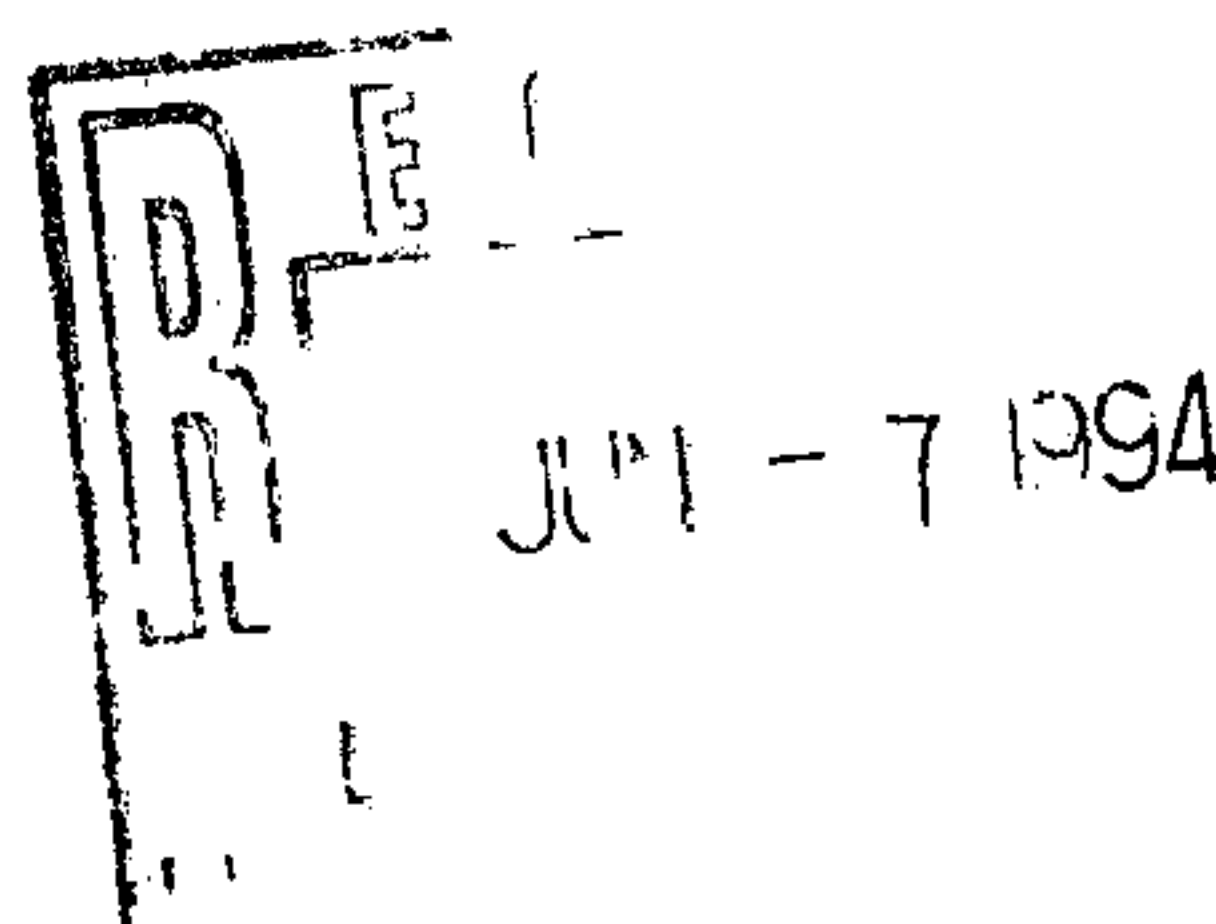
_____ YES
☒ NO
_____ COPY PROVIDED

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: 6/7/94

BY: John M. MacKenzie
John M. MacKenzie, PE





City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

May 9, 1995

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

RE: DRAINAGE PLAN FOR EVER READY OIL/ALAMEDA CENTER NORTH
(C18-D22) ENGINEER'S STAMP DATED 4/24/95.

Dear Mr. MacKenzie:

Based on the information provided on your April 24, 1995 submittal, listed are some concerns that will need to be addressed prior to final approval:

1. Location, description and "elevation" of T.B.M.
2. Location and direction of proposed roof drains.
3. Top of curb and flowline elevation on Alameda.

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 Associate

BJM/dl

c: Andrew Garcia

File



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

June 13, 1995

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

RE: REVISED DRAINAGE PLAN FOR EVER READY OIL/ALAMEDA CENTER
NORTH (C18-D22) ENGINEER'S STAMP DATED 6/7/95.

Dear Mr. MacKenzie:

Based on the information provided on your June 7, 1995
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 will be required per the D.P.M. checklist.

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

Sincerely,

Bernie J. Montoya, CE
Engineering Associate

BJM/dl

c: Andrew Garcia
File



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

PROJECT Alameda Center North
SUBJECT Drainage
BY Jmm DATE 8/24/94
CHECKED _____ DATE _____
SHEET 3 OF _____

PROPOSED PONDING AREAS

Ponding Area A

Max Water Surface Area	Pond Bottom Area	Avg Area	Depth	Volume
1912 ft ²	1024 ft ²	1468 ft ²	1.5 ft	2202 ft ³

Ponding Area B

Max Water Surface Area	Pond Bottom Area	Avg Area	Depth	Volume
1296 ft ²	752 ft ²	1024 ft ²	1.5 ft	1536 ft ³

Ponding Area C

Max Water Surface Area	Pond Bottom Area	Avg Area	Depth	Volume
9216 ft ²	6320 ft ²	7768 ft ²	1.5 ft	11652 ft ³

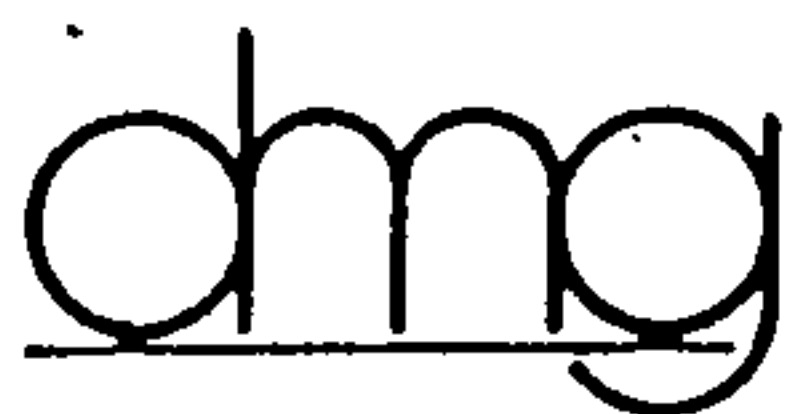
total Volume

15390 ft³

Provided

From AHYMO, the difference in runoff volume for Basins A and B is $22542 \text{ ft}^3 - 7383 \text{ ft}^3 = 15159 \text{ ft}^3$ (required)

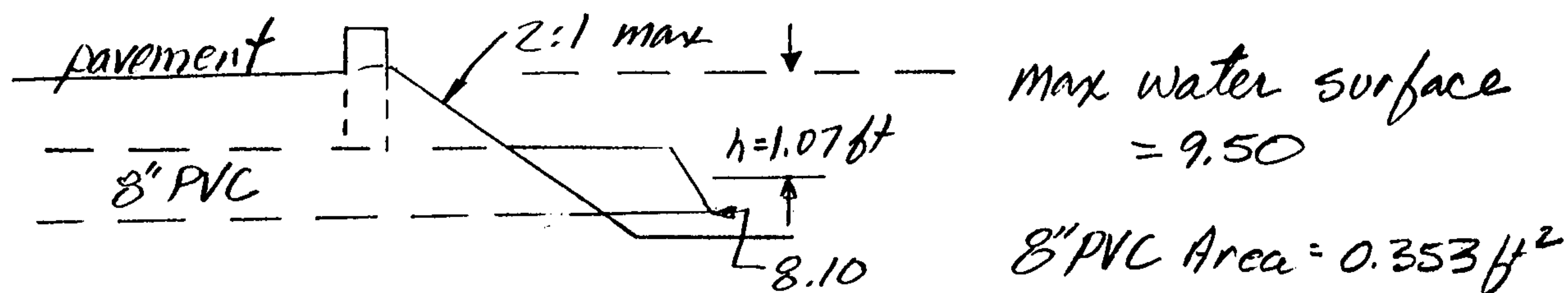
SEP - 11 1994



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

PROJECT Alameda Center North
SUBJECT Drainage
BY JMM DATE 8/24/94
CHECKED _____ DATE _____
SHEET 4 OF _____

Ponding Area C discharge will be throttled to the historical rate from Basin B of 2.34 cfs



The head required to permit a discharge of 2.34 cfs

is:

$$h = \left(\frac{Q}{0.8A} \right)^2 / 2g = \left[\frac{2.34}{(0.8)(0.353)} \right]^2 / 64.4 = 1.07 \text{ ft}$$

The off-site flow from Parcel A will be allowed to pass through the pond's spillway.

Spillway sizing for this pond will be based upon the flow from Parcel A and the flow from developed conditions within Basin B.

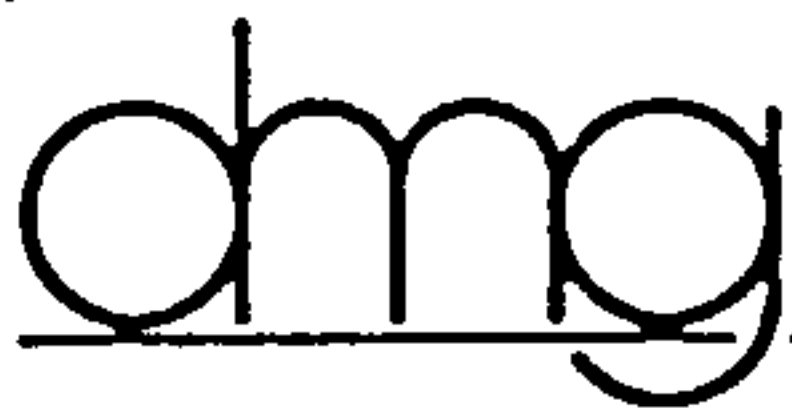
$$Q_{\text{spillway C}} = Q_{\text{Developed Basin B}} + Q_{\text{EXISTING PARCEL A}}$$

$$Q = 5.53 \text{ cfs} + 4.65 \text{ cfs} = 10.18 \text{ cfs}$$

$$L = \frac{Q}{2.9 H^{3/2}} = \frac{10.18 \text{ cfs}}{2.9 (0.5)^{3/2}} = 9.93 \text{ ft}$$

Provide 3 - 3.3' wide openings in curb @ Elev. = 9.50 and a two locations

SEP - 1 1994



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

PROJECT Ever Ready Oil
SUBJECT Drainage
BY gmm DATE 4/22/95
CHECKED _____ DATE _____
SHEET 1 OF _____

From the previous Alameda Center North file C18-D22, the total on-site ponding requirement for this site is $15,159 \text{ ft}^3$. Due to the placement of parking in the ponding area, volumes have to be checked.

Ponding Area A

Area of pond bottom (elev. 5.75) = 1260 ft^2

Area of max water surface (elev. 7.28) = 1890 ft^2

Total storage = $(1575 \text{ ft}^2)(1.5 \text{ ft})$ $1575 \text{ ft}^2 \text{ avg.}$

Volume provided = 2362 ft^3

Ponding Area B

Area of pond bottom (elev. 4.88) = 848 ft^2

Area of max water surface (elev. 6.38) = 1456 ft^2

Total Storage = $(1152 \text{ ft}^2)(1.5 \text{ ft})$ $1152 \text{ ft}^2 \text{ avg.}$

Volume provided = 1728 ft^3

Ponding Area C

Elev.	Area	Avg. Area	Depth	Volume
7.00	3164	3981	1.0	3981
8.00	4798	5861	1.0	5861
9.00	6923	8339	0.5	4170
9.75	9754			<u>14012 ft^3</u>

APR 24 1995
LANDROL SURV.

Total Storage = A + B + C = $2362 + 1728 + 14012 = 18,102 \text{ ft}^3$



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

PROJECT Ever Ready Oil
SUBJECT Drainage
BY JMM DATE 4/22/95
CHECKED _____ DATE _____
SHEET 2 OF _____

From the previous Alameda Center North File, anticipated discharge from Basin B is 5.53 cfs. The Ever Ready Oil site will generate 67% of this runoff, based upon area of the basin.

$$Q = (5.53)(.67) = 3.71 \text{ cfs}$$

Rigid curb opening as follows

$$L = \frac{Q}{2.9(H)^{1.5}} = \frac{3.71}{2.9(0.5)^{1.5}} = 3.61 \text{ or } 3'-7"$$

3'-7" opening will discharge into ponding area

DRAINAGE INFORMATION SHEET

PROJECT TITLE: EveReady Oil / Alameda Center North ZONE ATLAS/DRNG, FILE#: C18-D22
DRB #: _____ EPC #: _____ WORK ORDER #: _____
LEGAL DESCRIPTION: Lot 22 D, Block 12, Tract , Unit B, NAA
CITY ADDRESS: _____

ENGINEERING FIRM: Mark Goodwin & Associates, PA CONTACT: John M. MacKenzie, PE
ADDRESS: PO Box 90606 PHONE: 345-2010
OWNER: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
ARCHITECT: Kevin Georges Architects CONTACT: Mark Eshelman
ADDRESS: 127 Jefferson NE PHONE: _____
SURVEYOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

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

PRE-DESIGN MEETING:

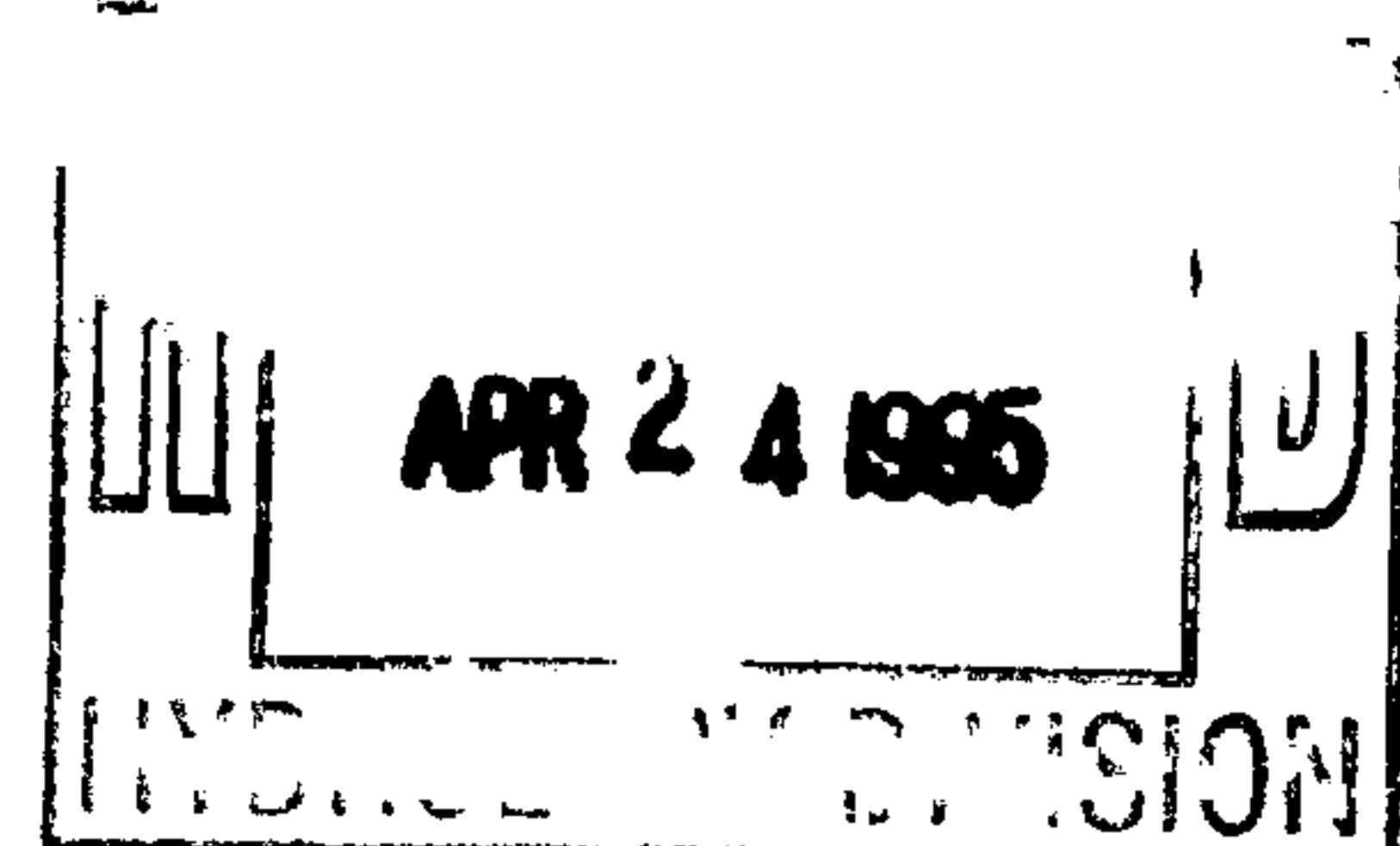
____ YES
X NO
____ COPY PROVIDED

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
X BUILDING PERMIT APPROVAL
____ CERTIFICATION OF OCCUPANCY APPROVAL
____ GRADING PERMIT APPROVAL
____ PAVING PERMIT APPROVAL
____ S.A.D. DRAINAGE REPORT
____ DRAINAGE REQUIREMENTS
____ OTHER _____ (Specify)

DATE SUBMITTED: 4/25/95

BY: John M. MacKenzie
John M. MacKenzie, PE





D. Mark Goodwin & Associates, P.A.
Consulting Engineers and Surveyors
P.O. BOX 90606, ALBUQUERQUE, NM 87199
(505) 345-2010

June 7, 1995

Mr. Loren Meinz
Hydrology Division
City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87103

Re: EverReady Oil / Alameda Center North (C-18 / D22)

Dear Mr. Meinz:

To address your concerns on the referenced project we have revised our grading and drainage plan as follows:

1. The fueling island does have a canopy and it is now called out. The area beneath the canopy has been regraded and better defined to collect fuel spills in the event of an accident. The plan calls for drainage beneath the canopy to be collected and discharged into the sanitary sewer system. The revised grading scheme should effectively route perimeter runoff around the canopy and not through the fueling area.
2. A call out for the carwash drain to connect to the sanitary sewer has been added to the plan.
3. An RV dump, propane tank, air and water are located on the center island. No liquid fueling will occur at this location.

Please feel free to contact me if you have any further questions.

Sincerely,

MARK GOODWIN & ASSOCIATES, P.A.

John M. MacKenzie, P.E.

JMM/smr

J. E. C. E. I. W. E.

JUN - 7 1995



D. Mark Goodwin & Associates, P.A.
Consulting Engineers and Surveyors
P.O. BOX 90606, ALBUQUERQUE, NM 87199
(505) 345-2010

September 26, 1994

Mr. Bernie Montoya
Hydrology Division
City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87199

**Re: ALAMEDA CENTER NORTH GRADING AND DRAINAGE PLAN FOR BUILDING PERMIT WITH
ENGINEER'S STAMP DATED 9/26/94, (C18-D22)**

Dear Mr. Montoya:

We have taken note of your comments issued on September 14, 1994 for the previously submitted grading and drainage plan covering this site. We now intend to address each comment accordingly:

1. During a meeting with Raymunda A. Van Hoven, of the NMSHTD in Santa Fe on September 22, 1994, the issue of downstream capacity in their Alameda interchange storm drain was discussed. She stated that this storm drain presently has sufficient capacity to convey historical flow during the 100 year storm from this basin. Our plan to discharge from our site at the historical rate into this storm drain was approved by her after review of our plan.
2. The plan now re-identifies the concept used on the conceptual plan of subsurface discharge into the drop inlet located in Alameda Blvd. This request was also made by Ms. Van Hoven.
3. The pipe invert for pond "A" has been set to the elevation of the pond bottom.
4. The requested gravel pond bottoms were offered to the architect, but he declined because the EPC distinctly requested that as much "green" landscaping as possible be provided.
5. Surface flow along the south side of the motel has been directed into the asphalt parking area.
6. Your recommendation has been considered.
7. All buildings will be constructed under separate permits by the same general contractor. A note on the plan instructing the contractor to build all the storm drain infrastructure with the first building permit will address this concern.

As shown to you during a brief meeting in your office on September 22, the flood zone boundary that originally passed through this site was incorrectly positioned by us. In reality, it doesn't even come close to our property boundary. If your past concerns need further attention, please contact me.

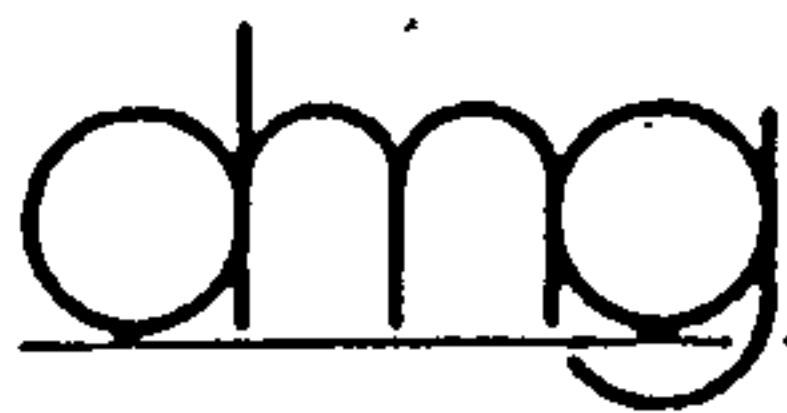
Sincerely,

MARK GOODWIN & ASSOCIATES, P.A.


John M. MacKenzie, P.E.

Attachment

SEP 27 1994



Discharge from Drainage Basin A is divided into two sub basins that direct flow into ponding areas A and B (see attached 8 1/2 x 11 mark-up).

Peak discharge from Ponding Area A will be 1.91 cfs:

Sub basin A-1 covers an area of 0.422 Ac.

This is 23% of the total Drainage Basin A (1.87 Ac)

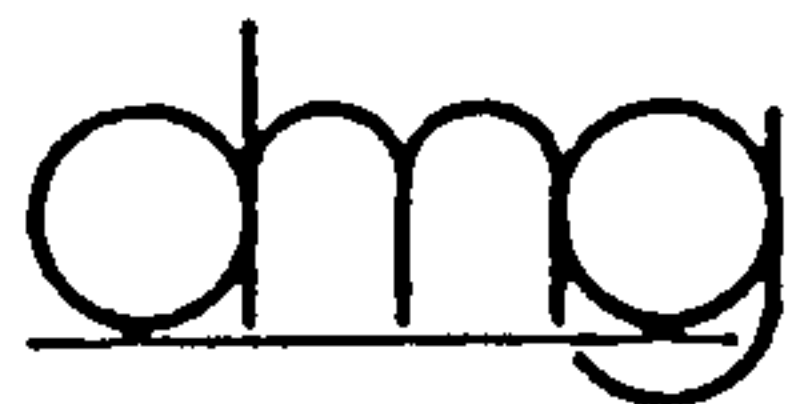
$$Q_{A-1 \text{ subbasin}} = (8.47 \text{ cfs})(0.23) = 1.91 \text{ cfs}.$$

Overflow from this pond will occur through a curb opening at its north end:

$$L = \frac{Q}{2.9(H)^{3/2}} = \frac{1.91 \text{ cfs}}{2.9(0.5)^{1.5}} = 1.86 \text{ ft} \quad \text{use 2' opening}$$

A 4" pipe is to be placed beneath pavement between Ponds A and B to drain Pond A.

Since this pipe is not design to control discharge from this basin (control of this basin's discharge will occur at the Pond B outfall), it will not be sized according to flow. since it is intended to drain the bottom of the pond only.



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

PROJECT Alameda Center North
SUBJECT Drainage
BY JMM DATE 8 24 94
CHECKED _____ DATE _____
SHEET 6 OF _____

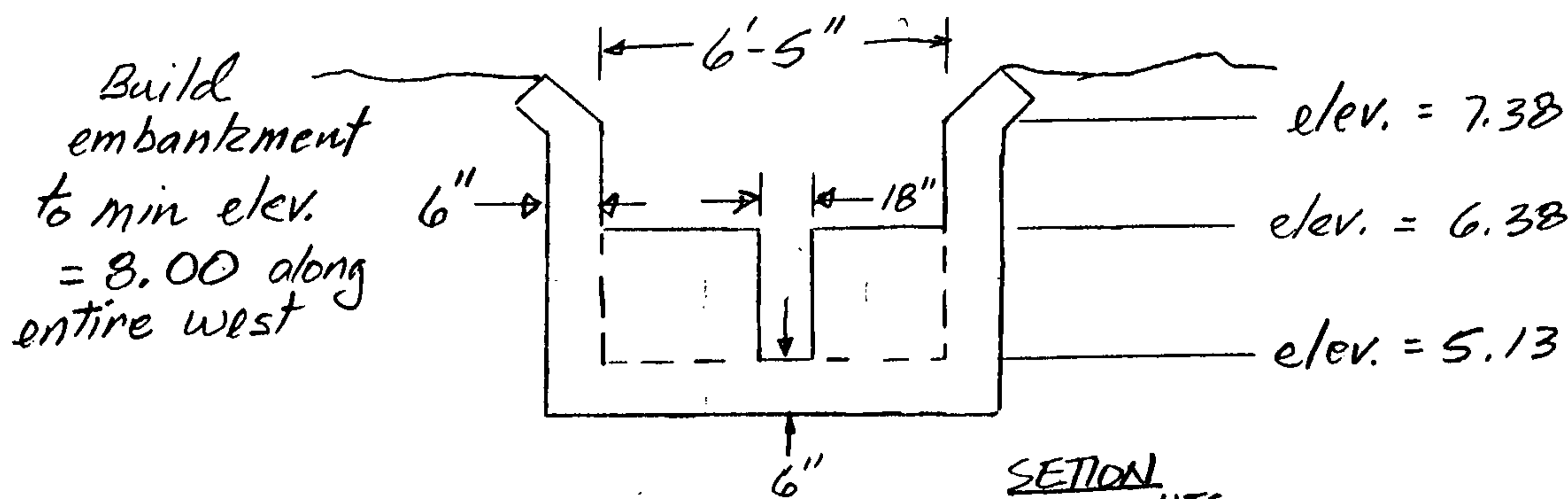
Receipt of runoff into Ponding Area B will occur at two locations with a potential rate of 18.59 cfs (Developed discharge for Basins A and B plus off-site runoff from Parcel A).

$$L = \frac{18.59}{2.9(0.67)^{1.5}} = 11.7 \text{ ft} \quad \text{use 2-4 openings and one @ 3.7'}$$

Discharge from the pond spillway will have a control opening to restrict flow to the undeveloped rate for Basins A and B, plus the pass-through flow of from off-site Parcel A $Q = A_{\text{dev.}} + B_{\text{dev.}} + \text{Parcel A} = 5.93 + 4.65$

$$Q_{\text{restricted}} = 10.58 \text{ cfs}$$

The controlled discharge and spillway will be designed as follows:



$$\begin{array}{r} 5.13 \\ .50 \\ \hline 4.63 \end{array}$$

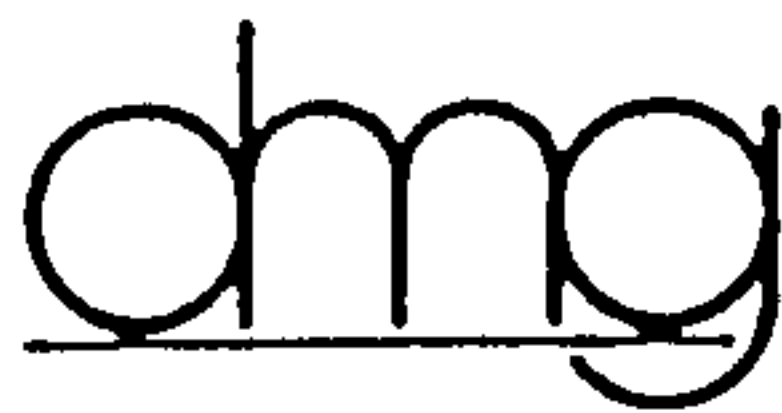
$$\begin{array}{r} 4.88 \\ 4.63 \\ \hline .25 \end{array}$$

$$\begin{array}{r} 7.9 \\ 8.44 \\ 4.63 \\ \hline 3.37 \end{array}$$

Controlled: $L = \frac{10.58}{2.9(1.25)^{1.5}} = 2.61 \text{ ft} \quad \text{use } L = 2'-7"$

Spillway: $L = \frac{18.59}{2.9(1.0)} = 6.41 \text{ ft} \approx 6'-5"$

SEP - 1 1994



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

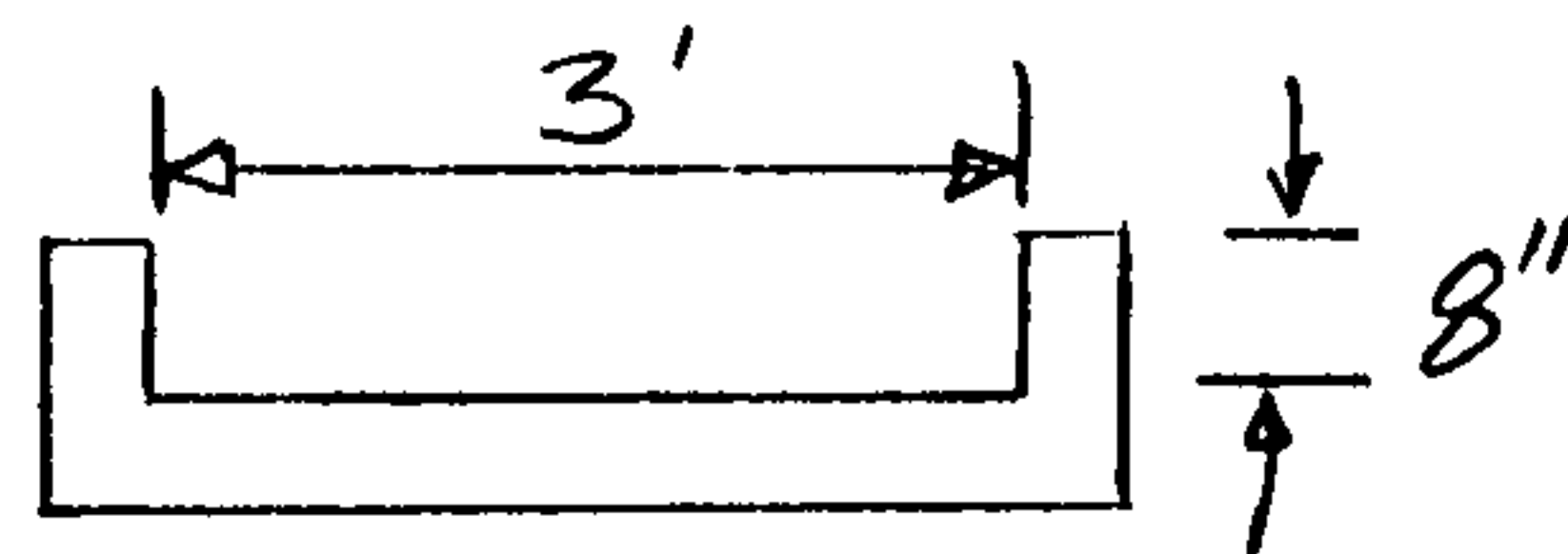
PROJECT Alameda Center North
SUBJECT Drainage
BY JMM DATE 8/24/94
CHECKED _____ DATE _____
SHEET 7 OF _____

Once past the spillway opening, the rundown to the East Frontage must be sized to convey the 18.59 cfs.

Between the ponding area and the property line a slope of 3% will be utilized.

$$Q = \frac{1.49}{.015} \left(2.01 \times \frac{2.01}{4.34} \right)^{.67} (.03)^{.5}$$

$$Q = 20.64 \text{ cfs}$$



$$WP = 4.34 \text{ ft}$$

$$\text{Area} = 2.01 \text{ ft}^2$$

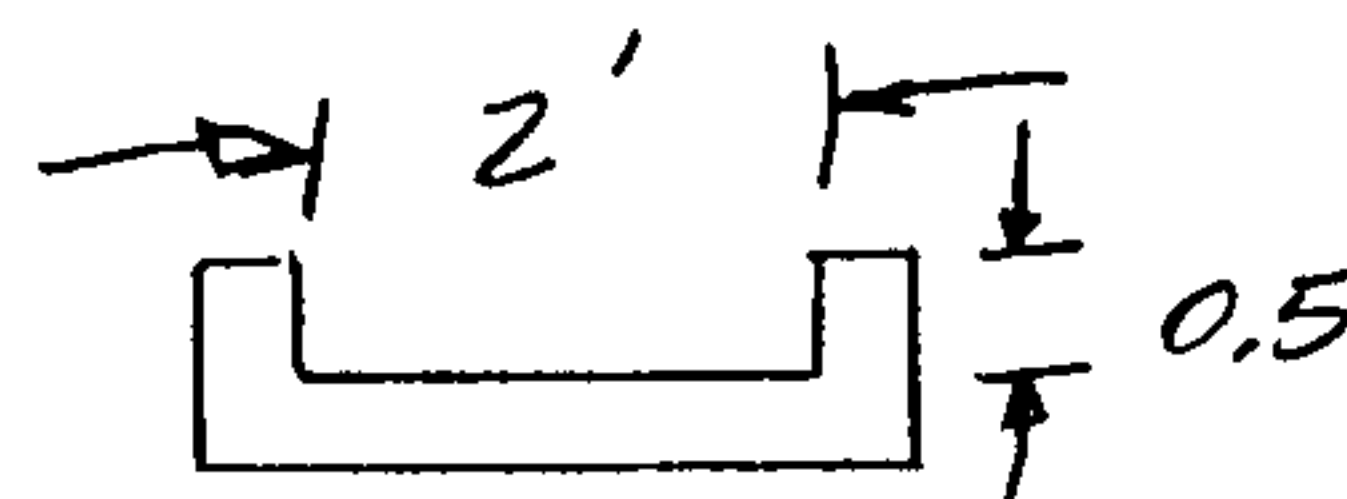
From the property line to the Frontage Rd the existing slope steepens from 5204.23 to 5188.70 within 55 ft for a slope of 28%.

$$Q = \frac{1.49}{.015} \left(1.0 \times \frac{1}{3} \right)^{.67} (.28)^{.5}$$

$$Q = 25.2 \text{ cfs}$$

$$WP = 3 \text{ ft}$$

$$\text{Area} = 1.0 \text{ ft}^2$$



SEP - 1 1994



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

September 14, 1994

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

RE: REVISED CONCEPTUAL DRAINAGE PLAN FOR ALAMEDA CENTER NORTH
(C18-D22) ENGINEER'S STAMP DATED 9/1/94.

Dear Mr. MacKenzie:

Based on the information provided on your September 1, 1994 resubmittal, the above referenced site is approved for Site Development Plan.

Please be advised that prior to Building Permit release, the following concerns must be addressed:

1. Have you determined downstream capacity?
2. You may want to establish the same concept of release that you proposed on your first submittal. It may be beneficial to release into the back of an existing catch basin in order to increase the allowable outflow.
3. Pipe inverts and pond bottoms must be at the same elevation. Check pond "A".
4. Recommend that a gravel pond bottom be implemented.
5. Recommend that you gutter the proposed motel south routing onto the asphalt area instead of onto the landscape.
6. An underground storm system is more attractive and required less maintenance than an above ground system.
7. Will all the buildings be built under the same building permit? If not you will need a phasing plan in which all the storm infrastructures will be built at the start of development.

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/8644

c: Andrew Garcia
File



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

July 14, 1994

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

RE: CONCEPTUAL DRAINAGE PLAN FOR ALAMEDA CENTER NORTH (C18-D22)
ENGINEER'S STAMP DATED 5/27/94.

Dear Mr. Mackenzie:

Based on the information provided on your June 7, 1994 submittal, the above referenced site is approved for Site Plan.

Please be advised that prior to Building Permit release, the following concerns must be addressed:

1. No ponding is acceptable within 15' feet from a planned or existing structure or closer than 15' feet from the property line minus the required setback on adjacent property. For ponds 18" deep or less, water may be impounded adjacent to the street Right-of-Way but not closer than 10' feet from the pavement. For ponds deeper than 18" water shall not pond closer than 15' feet to the street pavement or curb and gutter. Please check your proposed ponds for this restrictions.
2. Hydraulics for the complete storm drain system you are proposing. Does the existing inlet have the capacity for the proposed 6.34 cfs?
3. The proposed spillway adjacent to the State Highway Right-of-Way must be approved by the Highway Department.
4. Replat or easements required for cross-lot-line drainage.
5. Will the site be developed in phases, if so, site specific submittals for each phase will be required.

6. You have not included the off-site flows on your total runoff, how do you intend to accept them and pass them through the site?
7. Pond fencing is required for depths greater than 18".
8. Pond emergency spillway calculations.
9. Pond landscaping and maintenance provisions and commitments.
10. Details of ponds, swales, rundowns, emergency spillways and slopes.
11. If the site is going to be developed in phases, a proposed erosion control plan is required to determine how the erosion will be handled phase by phase.
12. Please include the 100-year water surface elevation outlined on the plan drawing.
13. Please include the proposed berm compaction specifications.
14. You will need to identify what impact the proposed development will have on the 100-year flood zone encroaching the west portion of the property.

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/8644

c: Andrew Garcia
File



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

PROJECT Alameda Development
SUBJECT Drainage
BY JMM DATE 6/7/94
CHECKED _____ DATE _____
SHEET 1 OF _____

PROJECT DRAINAGE CONCEPT

As shown on the attached grading and drainage plan, this development will involve construction of a restaurant, fuel station and motel on 4 tracts. Because of the lack of development on Parcel B, only a temporary de silting basin will be constructed. Three detention ponds, (A) at the northwest corner of the site, (B) along its west edge and (C) along the north side of the motel's eastern parking lot. Discharge from the site will be restricted to the undeveloped rate and on-site detention ponds will hold the difference between developed and undeveloped volume.

On Site Existing Conditions

$$Q = 6.58 \text{ cfs}$$

$$\text{Volume} = 8185 \text{ cu. ft.}$$

On-Site Proposed Condition

$$Q = 16.32 \text{ cfs}$$

$$\text{Volume} = 26,415 \text{ cu. ft.}$$

Ponding Requirement 18,230 cu. ft.

Ponding Area A - at the northwest corner of the site
area @ max water surface of 5205 = 1330 ft^2
area @ pond bottom = 458 ft^2

$$\text{Avg Area } 894 \text{ ft}^2$$

At ponding depth of 2', storage volume = 1788 ft^3

Fencing required

JUN - 7 1994



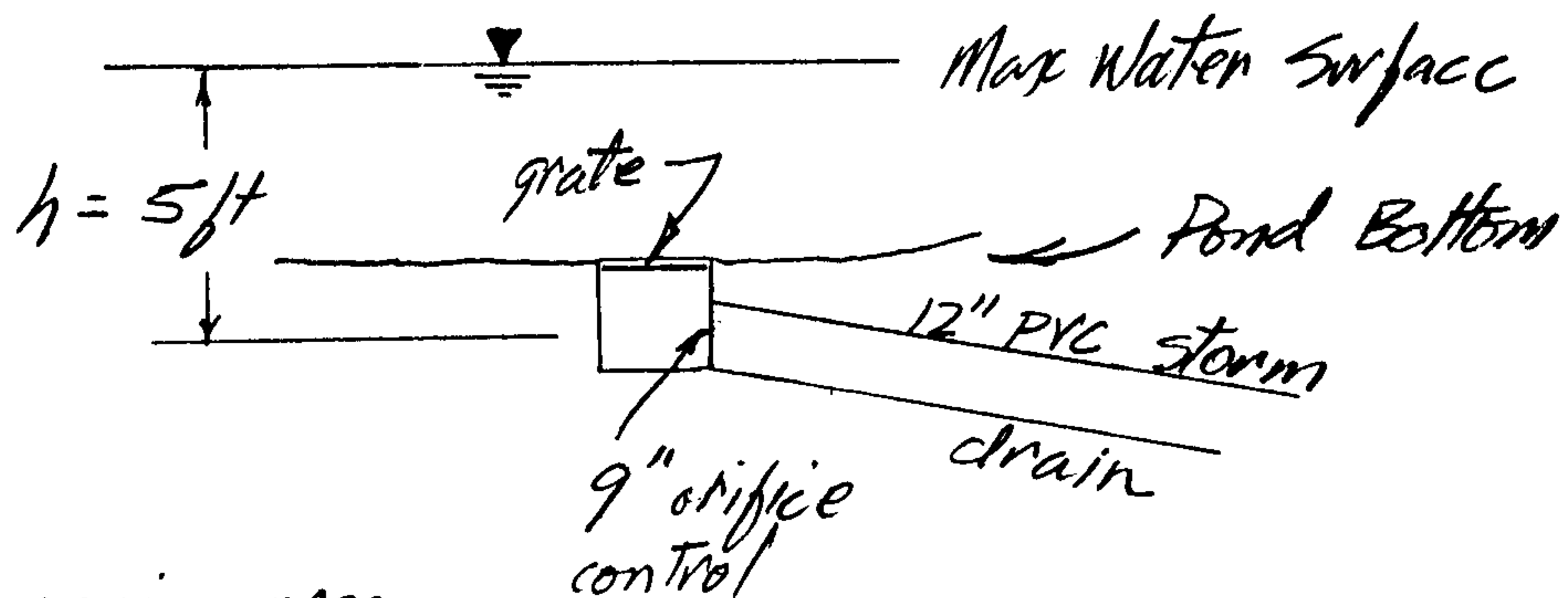
D. Mark Goodwin & Associates, P.A.
Consulting Engineers and Surveyors

PROJECT Alameda Development
SUBJECT Drainage
BY JMM DATE 6/7/94
CHECKED _____ DATE _____
SHEET 3 OF _____

Controlled Site Discharge

Based upon the existing on-site discharge of 6.58 cfs, developed site discharge to the back of the storm drain in Alameda Blvd. will be restricted with an orifice placed on the opening of the storm drain inlet in ponding Area B.

10' 0" gwn with
sur/ce elevation
on each p.m.



@ 9" opening area

$$a = 0.442 \text{ ft}^2$$

$$Q = C a \sqrt{2 g h} = (0.8)(0.442) \sqrt{2(32.2)(5)}$$

$$Q = 6.34 \text{ cfs}$$



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

PROJECT Alameda Development
SUBJECT Drainage
BY JMM DATE 6/7/94
CHECKED _____ DATE _____
SHEET 2 OF _____

Ponding Area B - Along the west property line

area @ max. water surface = 7330 ft^2
area @ pond bottom 560 ft^2

Avg Area = 3945

@ Ponding depth of 3', storage volume = 11835 ft^3

Ponding Area C - located north of the eastern motel parking lot.

area @ max pond water surface = 3190 ft^2
area @ pond bottom $= 970 \text{ ft}^2$

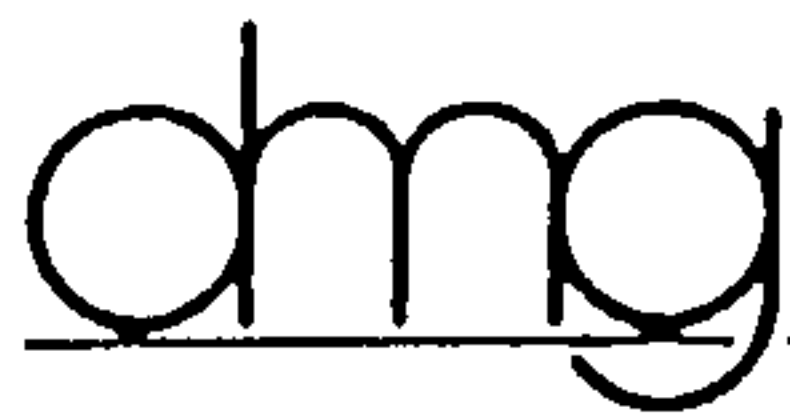
Avg. Area = 2080 ft^3

@ Ponding Depth of 2.25 ft storage volume = 4680 ft^3

Total Ponding storage Provided:

Pond A	1788 ft^3
Pond B	11835 ft^3
Pond C	<u>4680</u>
	18303 ft^3

100yr storm ponding requirement = 18230 ft^3



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

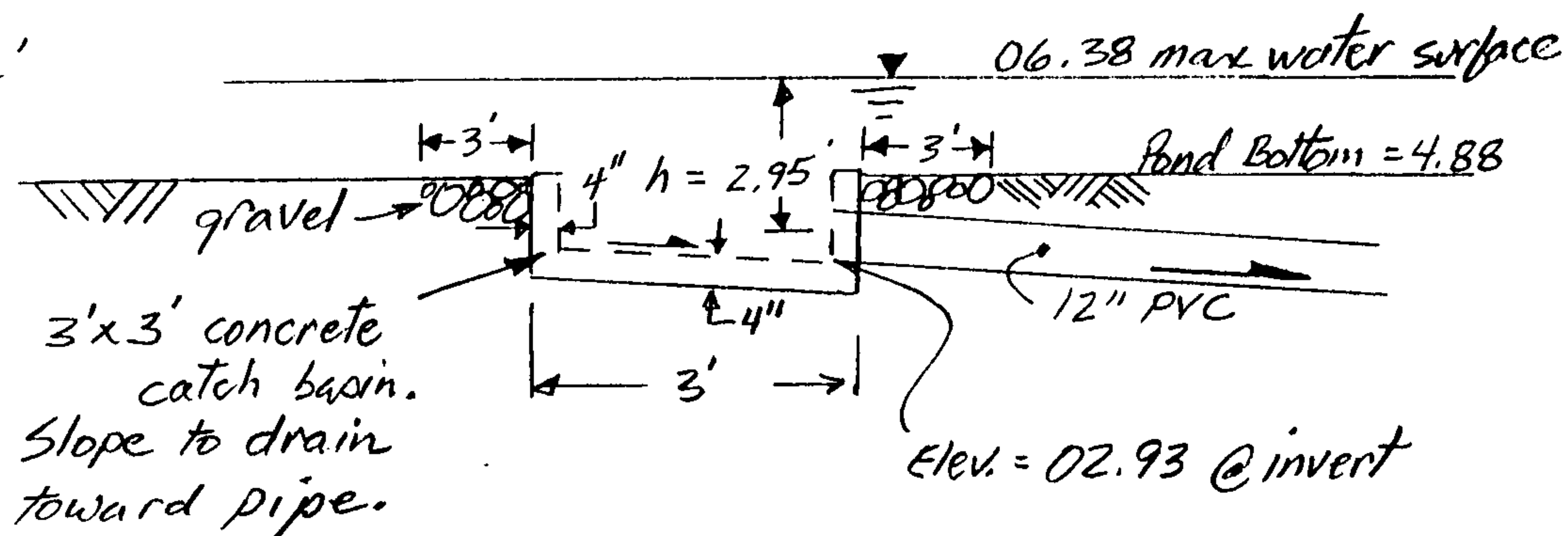
PROJECT Alameda Development
SUBJECT Drainage
BY dmg DATE 9/26/94
CHECKED _____ DATE _____
SHEET 2 OF _____

Use 12" PVC to orifice control discharge from
pond "B"

$$h = \left(\frac{8.67}{(1.8)(.785)} \right)^2 / 2g$$

$$A_{12"} = .785 \text{ ft}^2$$

$$h = 2.95 \text{ ft}$$



INLET DETAIL FOR POND B

SEP 27 1994

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Alameda Center North ZONE ATLAS/DRNG, FILE# (C-18/D-22)
DRB #: 94-411 EPC #: _____ WORK ORDER #: _____
LEGAL DESCRIPTION: _____
CITY ADDRESS: _____

ENGINEERING FIRM: D. Mark Goodwin CONTACT: John MacKenzie
ADDRESS: Box 90606 PHONE: 345-2010
OWNER: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
ARCHITECT: DCSW CONTACT: Marc Schiff
ADDRESS: _____ PHONE: 8439639
SURVEYOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CONTRACTOR: S&J CONTACT: Ron McCormick
ADDRESS: _____ PHONE: 884-6234

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: 10/3/94

BY: John M. MacKenzie

JUN 14 1995