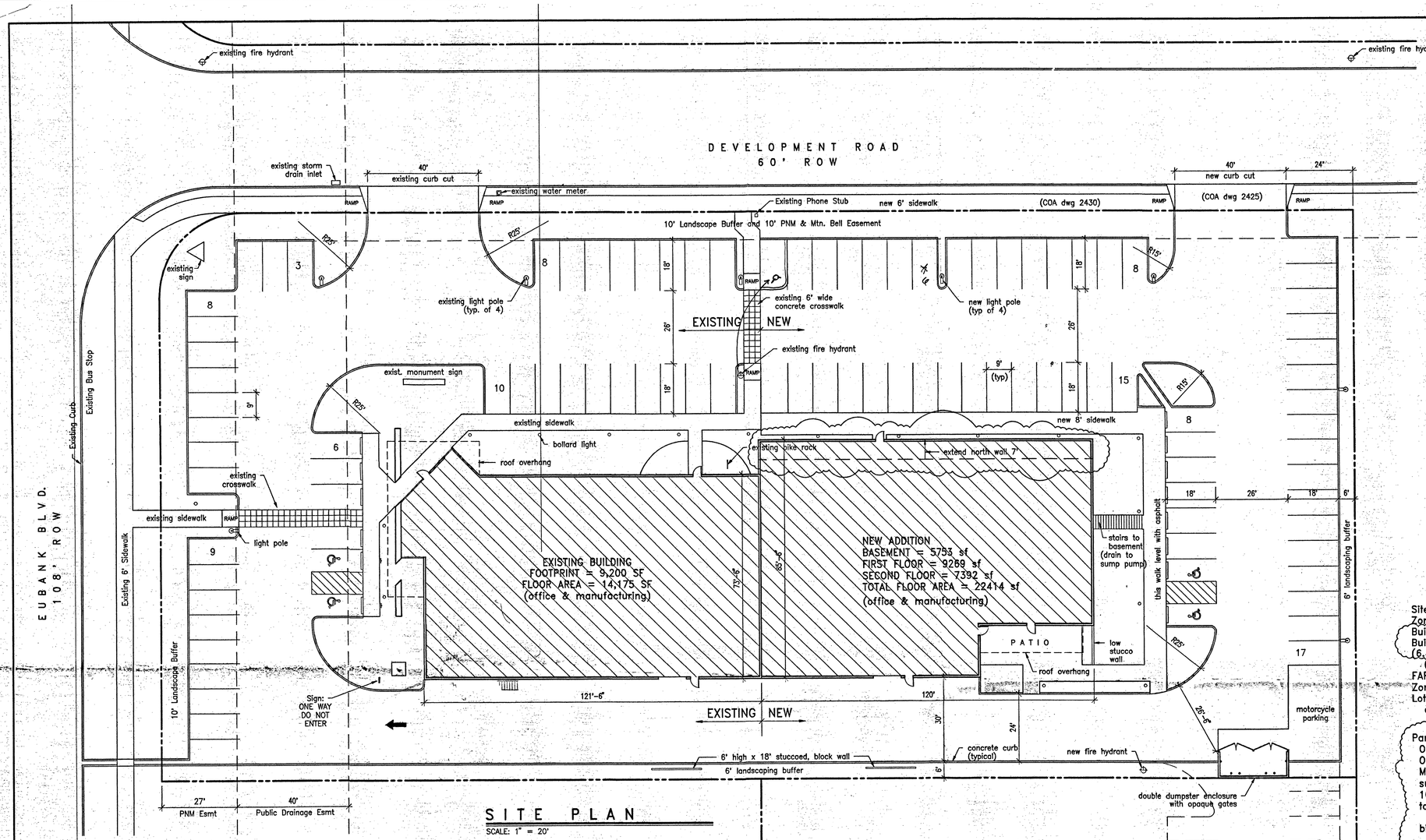


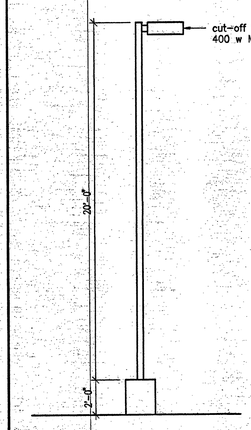
SITE PLAN

SCALE: 1" = 20'

NORTH

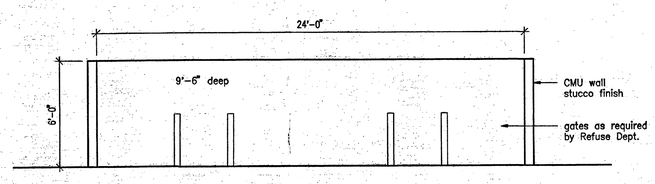
0 10 20 30 40 50

Note: See Grading and Drainage plan for utilities information.



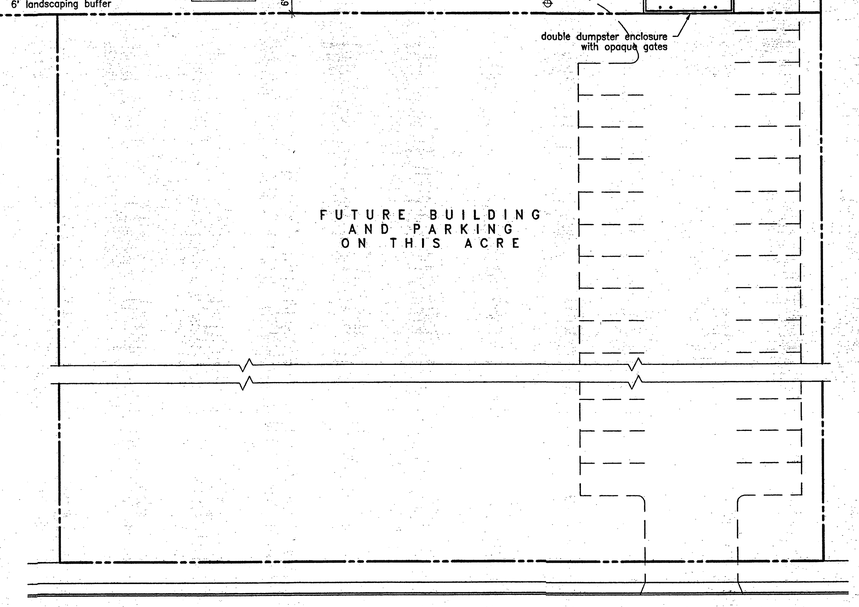
LIGHT POLE ELEVATION

SCALE: 1/4" = 1'-0"



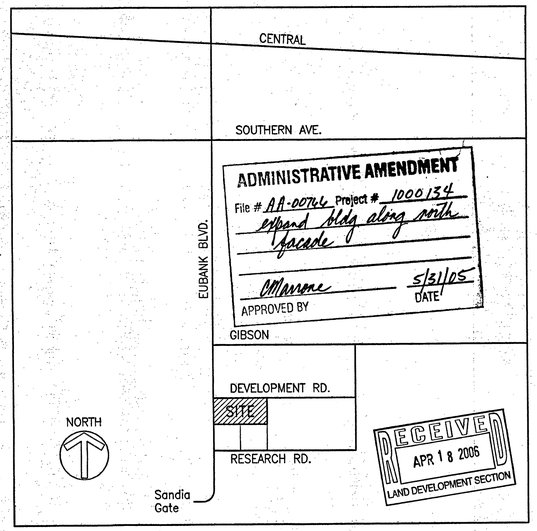
DUMPSTER ENCLOSURE

SCALE: 1/4" = 1'-0"



VICINITY MAP

SCALE: 1" = 600'



ZONE ATLAS PAGE: M-21-Z

Site Area: 2 acres
Zoning SU-1 for IP
Building Footprint: 18,040 sf
Building Floor Area: 36,589 sf
(6.4% greater than approved 34,375 sf)
(2 storey + basement)
FAR: .20
Zone Atlas Map M-21
Lot 1-A-1 of Block 2
of Sandia Research Park

Parking Spaces Required:

Office, 1st floor	9450 sf / 200 =	47
Office, 2nd floor	12239 sf / 300 =	41
Manufacturing	14900 sf / 1000 =	15
sub-total		103
10% bus credit		-10
total		93
bicycle parking	93 / 20 =	5

Parking Provided: ~~99~~ 98 (incl. 4 H.C. spaces)

Inside bicycle storage:
Wall mounted, lockable bike hangers have been provided in existing building

Showers: Existing building has one shower and new building will have one more.

Future Phase is to be delegated to the Development Review Board (DRB) for approval

PROJECT NUMBER: 1000134

APPLICATION NUMBER: 04DRB-01867

Is an Infrastructrue List required? ( ) Yes ( ) No
If yes, then a set of approved DRC plans with a work order is required for any construction within Public Right-of-Way or for construction of public improvements.

DRB SITE DEVELOPMENT PLAN APPROVAL:

Traffic Engineering, Transportation Division	Date
Utilities Development	Date
Parks and Recreation Department	Date
City Engineer	Date
• Environmental Health Department (conditional)	Date
Solid Waste Management	Date
DRB Chairperson, Planning Department	Date

• Environmental Health, if necessary

ALEXANDER HARRISON
ARCHITECT
8605 Mountain Road NE, Albuquerque, NM 87112, 299-6322

STATE OF NEW MEXICO
ALEXANDER HARRISON
1507
REGISTERED ARCHITECT
4/29/05

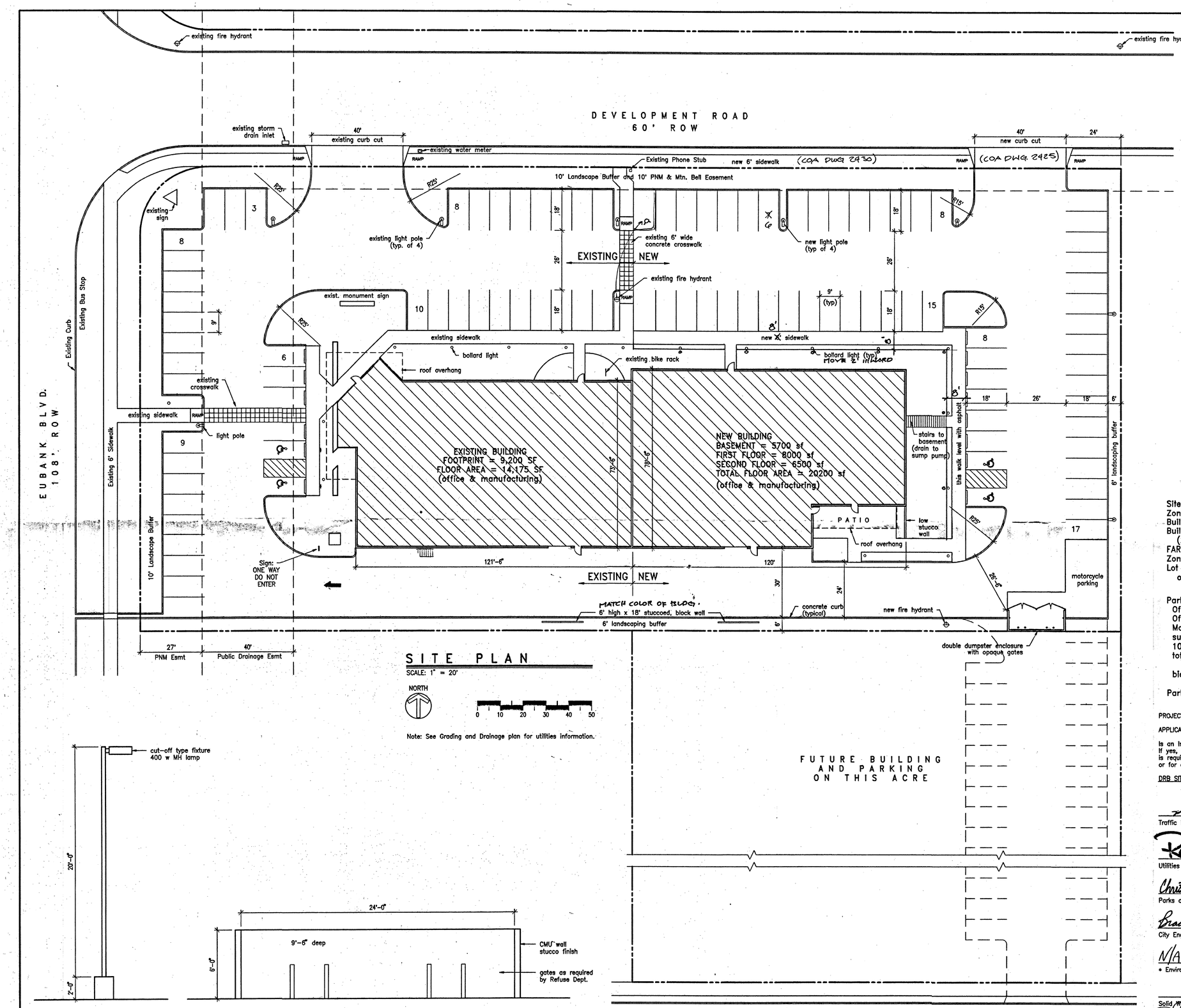
proj: 107 drwn: AH chkd: AH
file: 1PROJECT\TEAMPH2\EPC-SITE

date: MAR 25, 2002
revisions: NOV 26, 2004 – EPC Conditions
APR 29, 2005 – Admin. Amend.

Team Specialty Products
Phase II
Albuquerque, New Mexico

SITE PLAN

sheet number
1
of 3 sheets



SITE PLAN

SCALE: 1" = 20'

NORTH

0 10 20 30 40 50

Note: See Grading and Drainage plan for utilities information.

LIGHT POLE ELEVATION

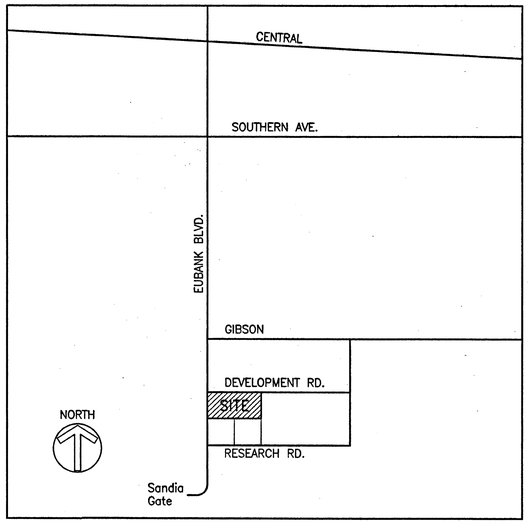
SCALE: 1/4" = 1'-0"

DUMPSTER ENCLOSURE

SCALE: 1/4" = 1'-0"

VICINITY MAP

SCALE: 1" = 600'



ZONE ATLAS PAGE: M-21-Z

Site Area: 2 acres
Zoning SU-1 for IP
Building Footprint: 17,200 sf
Building Floor Area: 34,375 sf
(2 storey + basement)
FAR: .20
Zone Atlas Map M-21
Lot 1-A-1 of Block 2
of Sandia Research Park

Parking Spaces Required:

Office, 1st floor	9000 sf / 200 =	45
Office, 2nd floor	11475 sf / 300 =	38
Manufacturing	13900 sf / 1000 =	14
sub-total		97
10% bus credit		-9
total		88

bicycle parking 88 / 20 = 5

Parking Provided: ~~95~~ 98 (incl. 4 H.C. spaces)

PROJECT NUMBER: 1000134

APPLICATION NUMBER: 04DRB-01867

Is an Infrastructrue List required? ( ) Yes (X) No
If yes, then a set of approved DRC plans with a work order is required for any construction within Public Right-of-Way or for construction of public improvements.

DRB SITE DEVELOPMENT PLAN APPROVAL:

Traffic Engineering, Transportation Division	Date 12-17-04
Utilities Development	Date 12.15.04
Parks and Recreation Department	Date 12/15/04
City Engineer	Date 12/15/04
N/A * Environmental Health Department (conditional)	Date
Solid Waste Management	Date
DRB Chairperson, Planning Department	Date 12/15/04

* Environmental Health, if necessary

Inside bicycle storage:
Wall mounted, lockable bike hangers have been provided in existing building

Showers: Existing building has one shower and new building will have one more.

Future Phase is to be delegated to the Development Review Board (DRB) for approval

RECEIVED
APR 18 2006
LAND DEVELOPMENT SECTION

ALEXANDER HARRISON
ARCHITECT
8605 Mountain Road NE, Albuquerque, NM 87112, 299-6322

STATE OF NEW MEXICO
ALEXANDER HARRISON
1507
REGISTERED ARCHITECT
11/26/04

proj: 107 drwn: AH chkd: AH
file: 1PROJECT\TEAMPH2\EPC-SITE

date: MAR 25, 2002
revisions: NOV 26, 2004 – EPC Conditions

Team Specialty Products Phase II

Albuquerque, New Mexico

SITE PLAN

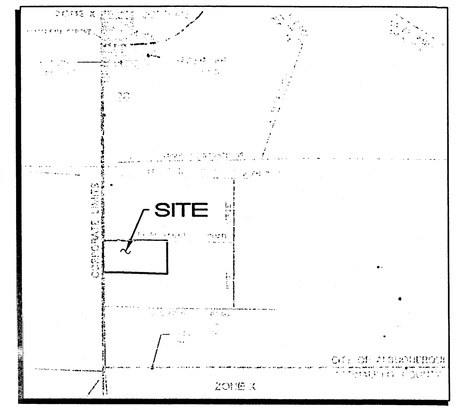
sheet number 1 of 3 sheets

LEGEND

5200	EXISTING CONTOUR
52	PROPOSED CONTOUR
75.5	EXISTING SPOT ELEVATION
78.3	PROPOSED SPOT ELEVATION
TC 74.8 / FL 74.3	TOP OF CURB / FLOWLINE ELEVATION
	FLOW ARROW
	DRAINAGE BASIN BOUNDARY
	EXISTING CURB & GUTTER
	PROPOSED CURB & GUTTER
	PROPOSED CURB
	FIRE HYDRANT
73.8	AS-BUILT ELEVATION

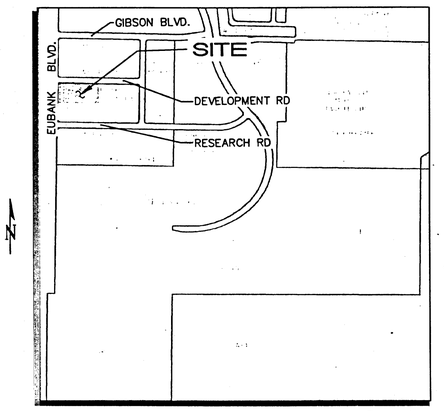
EASEMENT DATA

1. EXISTING 27' PNM EASEMENT
2. EXISTING 40' PUBLIC DRAINAGE EASEMENT
3. EXISTING 10' PUBLIC UTILITY EASEMENT



PANELS 366 & 367 — 1"=500'±

FLOOD ZONE MAP



M-21-Z — 1"=750'±

VICINITY MAP

KEYED NOTES

(A) REMOVE EXISTING REFUSE ENCLOSURE – SEE ARCHITECTURAL SITE PLAN. REMOVE AND DISPOSE OF EXISTING PAVED ROAD AND CURBING ON EAST SIDE OF BUILDING.

(B) REMOVE, DISPOSE AND REPLACE 180± LF CURBING ALONG SOUTH PROPERTY LINE ALONG WITH ASPHALT PAVING AS NEEDED TO ACHIEVE FLOWLINE GRADES SHOWN AND PROVIDE SMOOTH DRIVING SURFACE.

(C) CONSTRUCT NEW 2' WIDE CONCRETE VALLEY GUTTER WITH 1" INVERT.

(D) CONSTRUCT NEW 2' WIDE (BOTTOM WIDTH) CONCRETE 'U'-CHANNEL WITH 6" CURBS.

(E) INSTALL 4" X 8' PVC DRAIN PIPE UNDER WALK.

(F) 3" SUMP PUMP DISCHARGE LINE (FROM BASEMENT) TO DISCHARGE THROUGH CURB FACE AT INV= 73.65. SEE MECHANICAL PLAN FOR CONTINUATION.

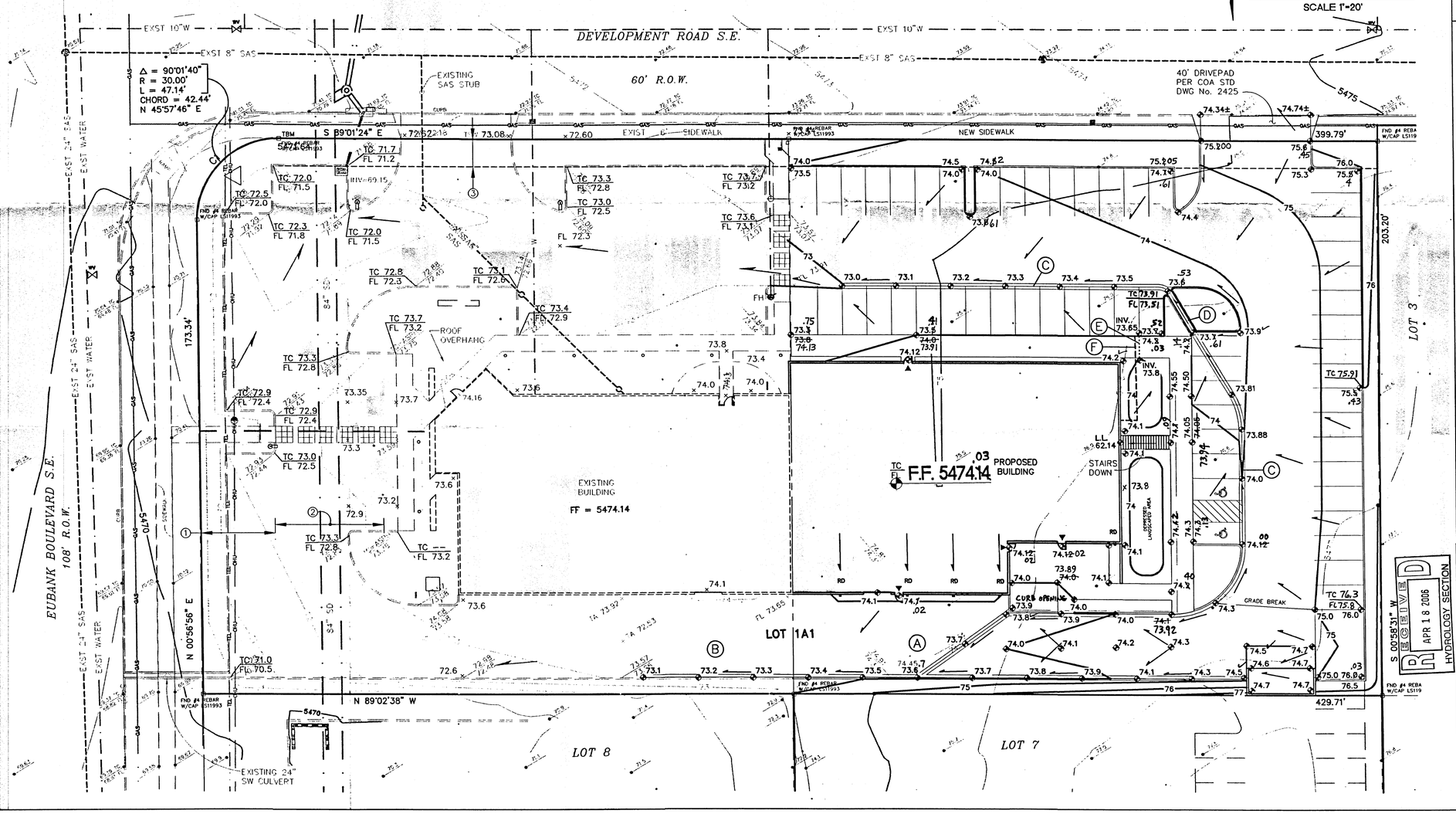
ENGINEER'S CERTIFICATION

I, SCOTT M. MCGEE, LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN DATED 02/15/05 (CITY APPROVAL LETTER DATED 03/28/05). AS-BUILT GRADES WERE FIELD VERIFIED BY HARRIS SURVEYING, NMLS NO. 11463 ON 04/17/06 IN ACCORDANCE WITH THE "NEW MEXICO ENGINEERING AND SURVEYING ACT" SECTION 61-23-1 THROUGH 61-23-32 NMSD (1978).

Scott M McGee — SCOTT M. MCGEE, NMPE NO. 10519

SCOTT M. MCGEE NEW MEXICO 10519 REGISTERED PROFESSIONAL ENGINEER

4-18-06 — DATE



SCALE 1"=20'

GENERAL NOTES

LEGAL DESCRIPTION: LOT 1A1, BLOCK 2, SANDIA RESEARCH PARK

AREA: 2.001 AC. (87,166 SF)
1.00 AC. (43,550 SF) LIMIT OF GRADING

BENCHMARK(S): ACS BRASS TABLET "3-L21" LOCATED 85 FT NORTH OF THE SOUTHERN AVE CENTERLINE AND 0.4 MILE EAST OF EUBANK BLVD. SE.
ELEVATION = 5503.00

TEMPORARY BENCHMARK: #4 REBAR WITH CAP AS SHOWN AT THE EAST RETURN OF THE NW PROPERTY CORNER:
ELEVATION = 5471.64

SURVEYOR: SOUTHWEST SURVEYING, SEPTEMBER, 1999.

FLOOD ZONE DESIGNATION: NO PORTION OF THIS SITE LIES WITHIN A FLOOD PLAIN AS DESIGNATED ON PANEL No's 366 & 367 OF THE FEMA FLOOD INSURANCE RATE MAPS DATED SEPTEMBER 20, 1996.

HYDROLOGY: PRECIPITATION ZONE: 3
THE EXISTING SITE IS DEVELOPED AND INCLUDES THE 15,000 SF BUILDING SHOWN ALONG WITH ASSOCIATED PAVED PARKING, AND XERISCAPE ON THE WEST HALF OF LOT 1A1. THE REMAINDER OF THE SITE IS CONSIDERED TYPE 'B' AS IT WAS MASS GRADED IN 1987.

EXISTING CONDITIONS:
LAND TREATMENT: 68% B, 3% C & 29% D

Q_{100} = (1.36)(2.6) + (0.06)(3.45) + (0.58)(5.02) = 6.7 CFS
TRACT 1A1 DRAINS WEST BOTH TO EUBANK BLVD & TO AN ONSITE CATCH BASIN IN THE NW CORNER OF THE PARKING LOT.

PROPOSED CONDITIONS:
BASIN A DRAINS TO AN EXISTING INLET IN THE NW CORNER OF THE PARKING AREA WHERE IT DISCHARGES TO A CATCH BASIN IN DEVELOPMENT ROAD. BASIN B DRAINS TO THE SW CORNER OF THE PARKING AREA AND IS DISCHARGED TO EUBANK BLVD. SE.

BASIN 'A' = 1.17 AC
'A': 5% B, 6% C & 89% D
Q_A = 5.6 CFS

BASIN 'B' = 0.83 AC
'B': 6% B, 4% C & 90% D
Q_B = 4.0 CFS

BASIN 'A' INLET CAPACITY (ORIFICE EQUATION)
A = 4.7 SF (@ 50% CLOGGED → A = 2.3 SF)
Q = (0.5)(2.3) $\sqrt{32.2}$ = 6.5 CFS (OK – Q_A = 5.6 CFS)

BASIN 'B' SW CULVERT CAPACITY (MANNING EQUATION)
FOR 6" DEPTH: Q = (1.486/.017)(1.00)(0.481)(0.14)
Q = 5.9 CFS (OK – Q_B = 4.0 CFS)

RECEIVED APR 18 2006 HYDROLOGY SECTION

SCOTT M. MCGEE NEW MEXICO 10519 LICENSED PROFESSIONAL ENGINEER 2-15-05

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico 87108
Ph. 505-268-8828 Fax. 505-268-2632

1093.2GRD.DWGrfh 02-15-05

TEAM SPECIALTY PRODUCTS PHASE II

Alexander Harrison - Architect

GRADING AND DRAINAGE PLAN

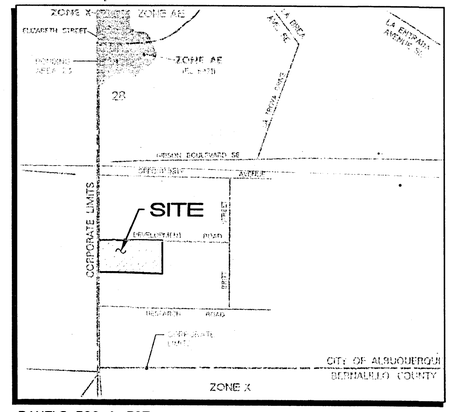
Checked By:	Drawn By:	No.	Revisions	
SMM	BJB			C-1
Date: 12.28.04	Job Number: 1093.2			SH. OF

LEGEND

5200	EXISTING CONTOUR
52	PROPOSED CONTOUR
75.5	EXISTING SPOT ELEVATION
78.3	PROPOSED SPOT ELEVATION
TC 74.8 / FL 74.3	TOP OF CURB / FLOWLINE ELEVATION
	FLOW ARROW
	DRAINAGE BASIN BOUNDARY
	EXISTING CURB & GUTTER
	PROPOSED CURB & GUTTER
	PROPOSED CURB
	FIRE HYDRANT

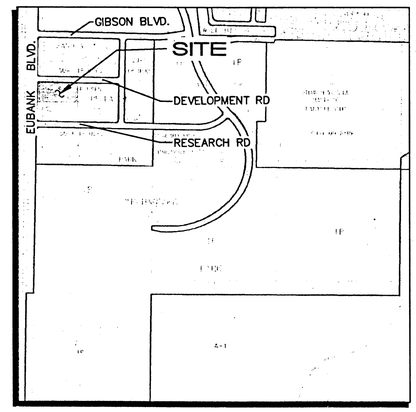
EASEMENT DATA

1. EXISTING 27' PNM EASEMENT
2. EXISTING 40' PUBLIC DRAINAGE EASEMENT
3. EXISTING 10' PUBLIC UTILITY EASEMENT



PANELS 366 & 367 1"=500'±

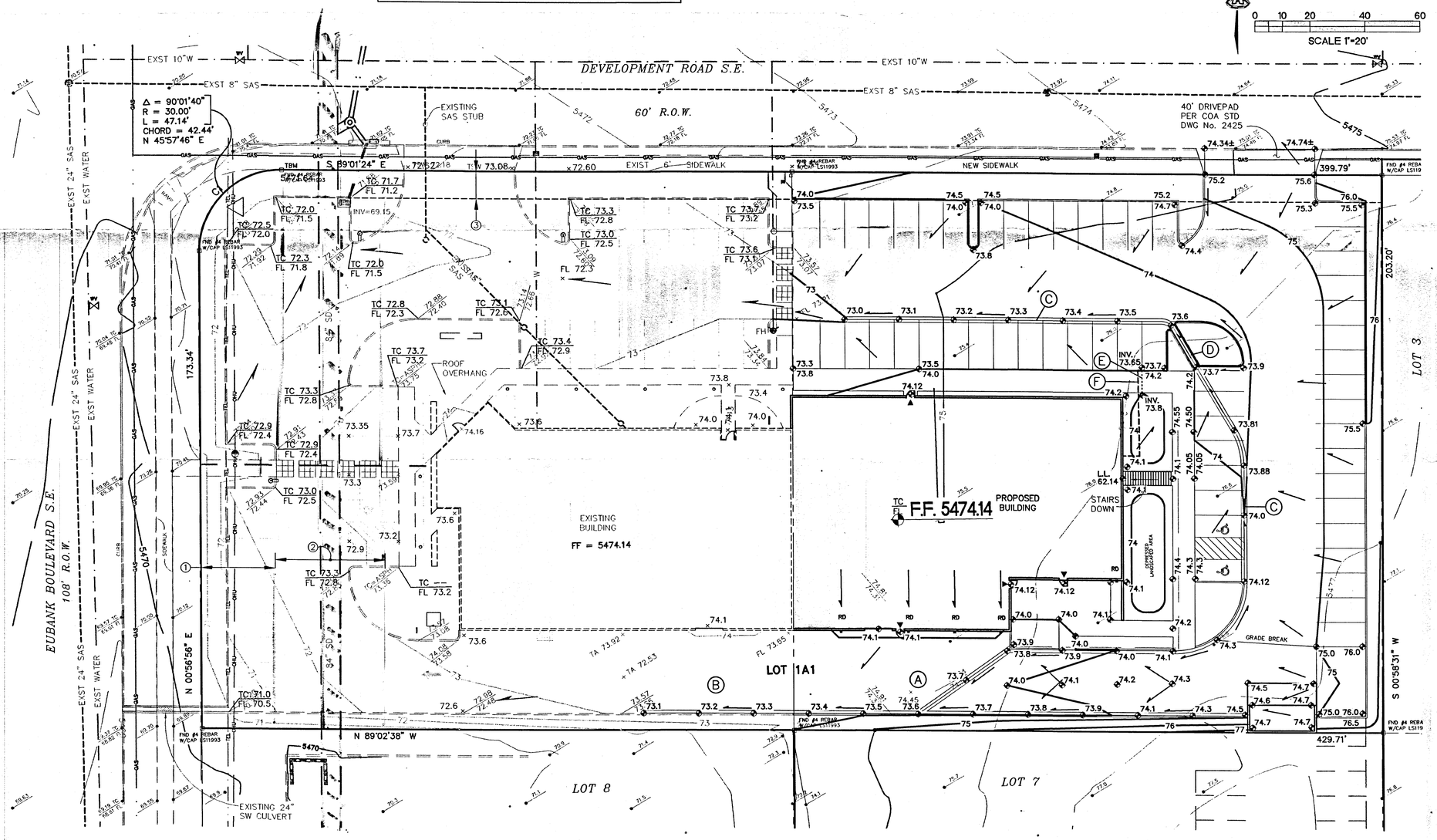
FLOOD ZONE MAP



M-21-Z 1"=750'±

VICINITY MAP

0 10 20 40 60
SCALE 1"=20'



KEYED NOTES

(A) REMOVE EXISTING REFUSE ENCLOSURE – SEE ARCHITECTURAL SITE PLAN. REMOVE AND DISPOSE OF EXISTING PAVED ROAD AND CURBING ON EAST SIDE OF BUILDING.

(B) REMOVE, DISPOSE AND REPLACE 180± LF CURBING ALONG SOUTH PROPERTY LINE ALONG WITH ASPHALT PAVING AS NEEDED TO ACHIEVE FLOWLINE GRADES SHOWN AND PROVIDE SMOOTH DRIVING SURFACE.

(C) CONSTRUCT NEW 2' WIDE CONCRETE VALLEY GUTTER WITH 1" INVERT.

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GENERAL NOTES

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BASIN 'A' INLET CAPACITY (ORIFICE EQUATION)
A = 4.7 SF (@ 50% CLOGGED → A = 2.3 SF)
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FOR 6" DEPTH: Q = (1.486/.017)(1.00)(0.481)(0.14)
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SCOTT M. McGEE NEW MEXICO 10519 LICENSED PROFESSIONAL ENGINEER 2/15/05

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Albuquerque, New Mexico 87108
Ph. 505-268-8828 Fax. 505-268-2632

1093.2GRD.DWGrfh 02-15-05

TEAM SPECIALTY PRODUCTS PHASE II

Alexander Harrison – Architect

GRADING AND DRAINAGE PLAN

Checked By:	Drawn By:	No.	Revision	C-1
SMM	BJB			
Date: 12.28.04	Job Number: 1093.2			SHEET OF

RECEIVED FEB 22 2005 HYDROLOGY SECTION

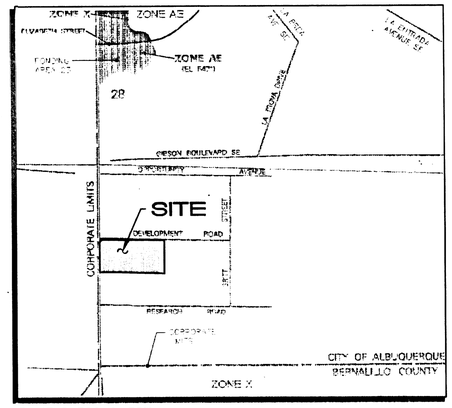
EASEMENT DATA

1. EXISTING 27' PNM EASEMENT
2. EXISTING 40' PUBLIC DRAINAGE EASEMENT
3. EXISTING 10' PUBLIC UTILITY EASEMENT

LEGEND

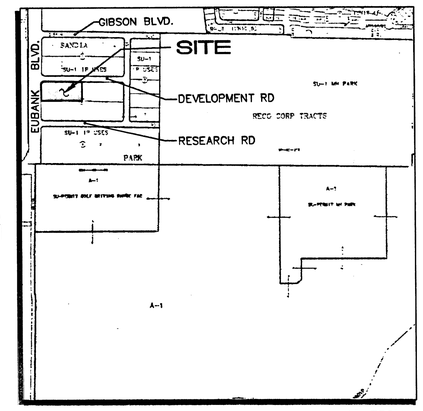
– –5200– –	EXISTING CONTOUR
—52—	PROPOSED CONTOUR
75.5	EXISTING SPOT ELEVATION
◆78.3	PROPOSED SPOT ELEVATION
TC 74.8 / FL 74.3	TOP OF CURB / FLOWLINE ELEVATION
	FLOW ARROW
	DRAINAGE BASIN BOUNDARY
	EXISTING CURB & GUTTER
	PROPOSED CURB & GUTTER
	PROPOSED CURB
	FIRE HYDRANT

SCALE: 1"=20'



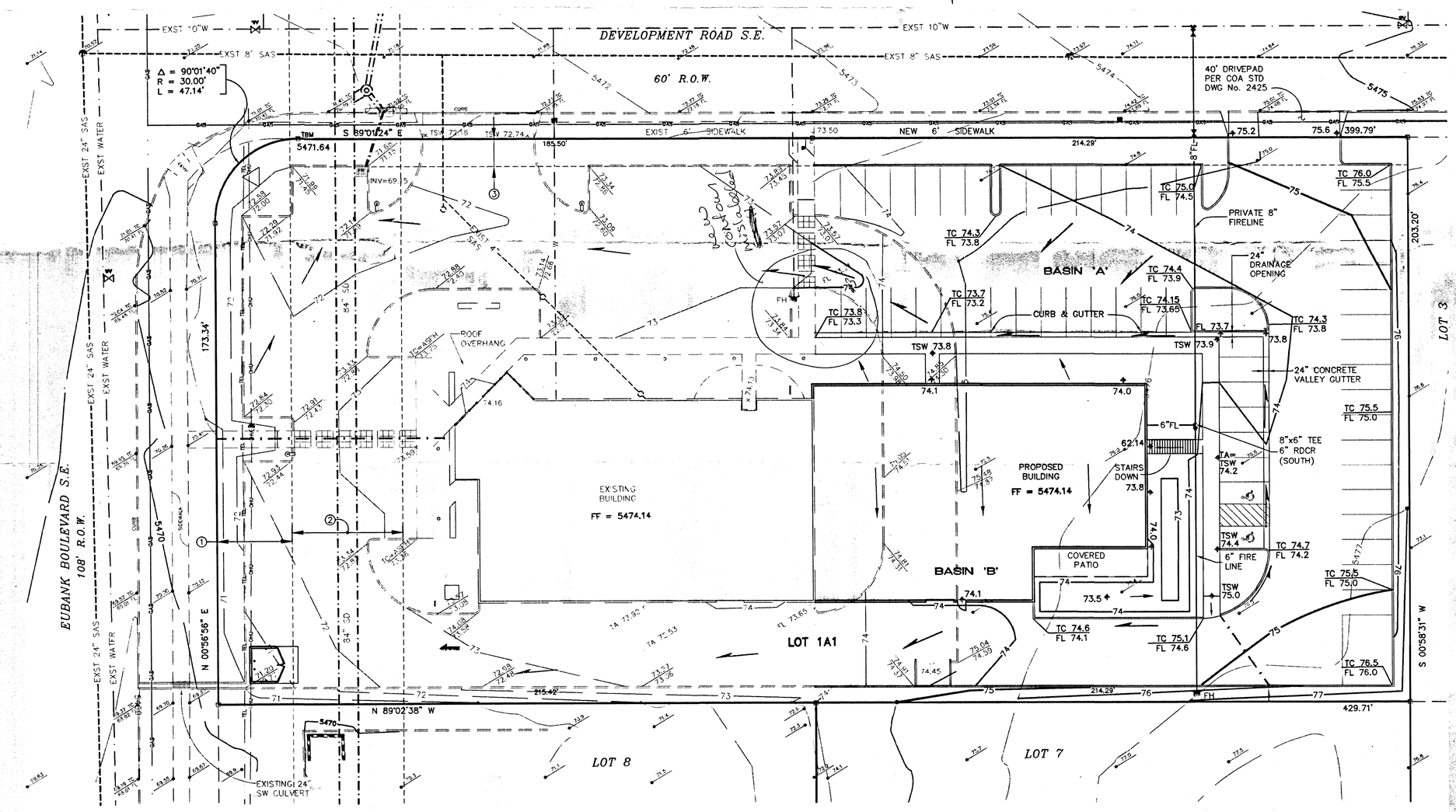
PANELS 366 & 367 — 1"=500'±

FLOOD ZONE MAP



M-21-Z — 1"=750'±

VICINITY MAP



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SURVEYOR: SOUTHWEST SURVEYING, SEPTEMBER, 1999.

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HYDROLOGY SECTION
MAR 27 2002
RECEIVED

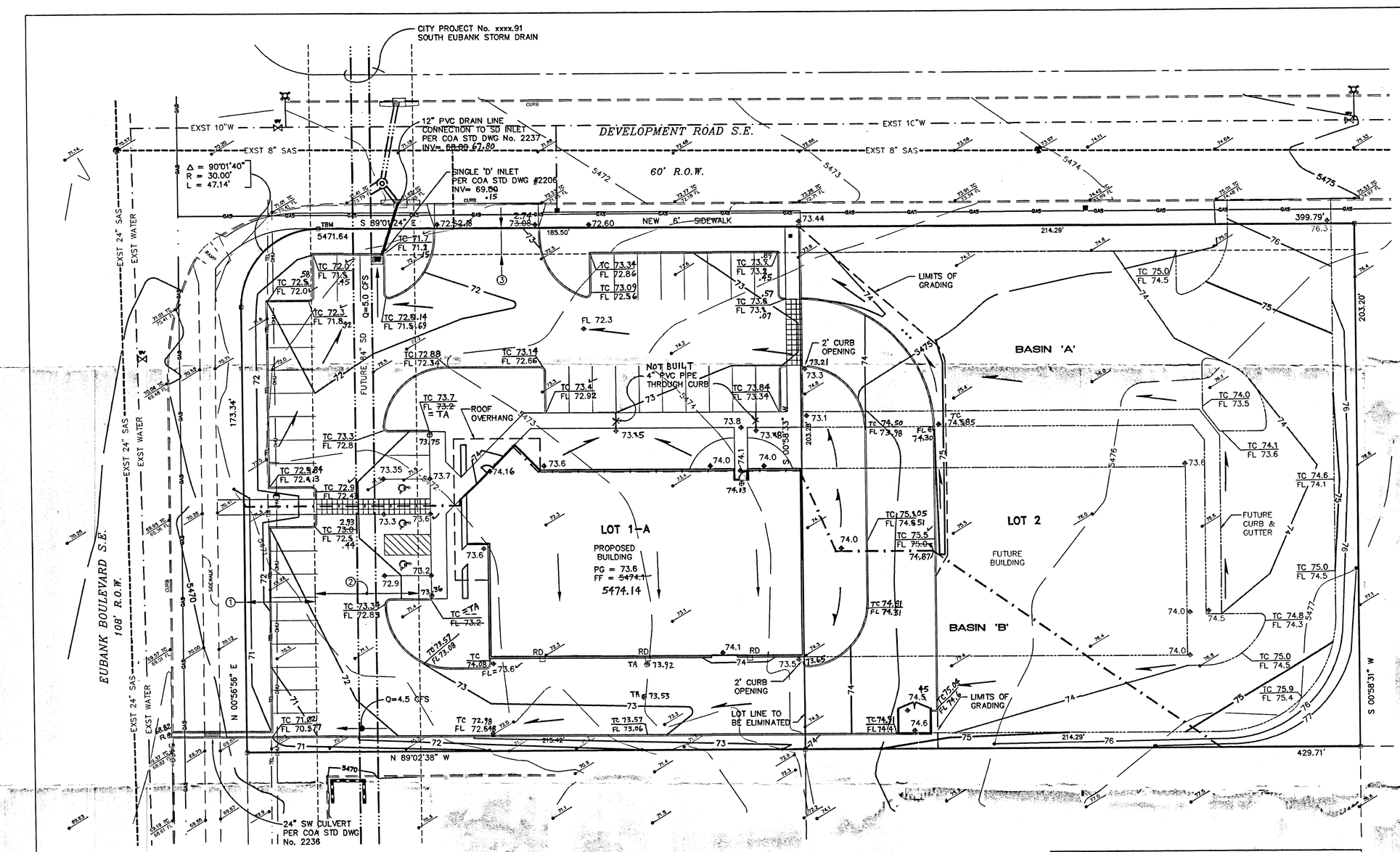
TEAM SPECIALTY PRODUCTS
PHASE TWO
GRADING, DRAINAGE & UTILITY PLAN

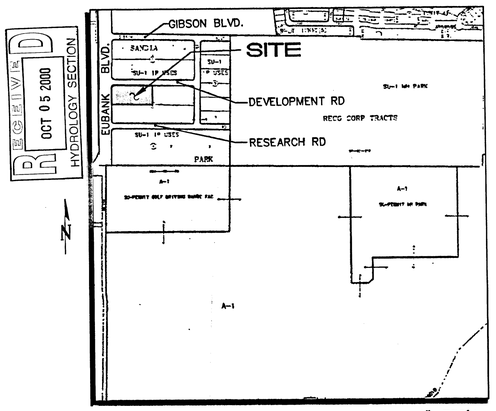
SCOTT M. McGEE
NEW MEXICO
10519
PROFESSIONAL ENGINEER
3/27/02

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico

093.1GRD.DWGnav | 03/26/02

SHEET C1





VICINITY MAP

SCALE: 1"=20'

LEGAL DESCRIPTION: LOTS 1-A & 2, BLOCK 2, SANDIA RESEARCH PARK

AREA: 2.0010 AC. (87,166 SF)
1.21 AC. (52,740 SF) LIMIT OF GRADING

BENCHMARK(S): ACS BRASS TABLET "3-L21" LOCATED 85 FT NORTH OF THE SOUTHERN AVE CENTERLINE AND 0.4 MILE EAST OF EUBANK BLVD. SE.
ELEVATION = 5503.00

TEMPORARY BENCHMARK: #4 REBAR WITH CAP AS SHOWN AT THE EAST RETURN OF THE NW PROPERTY CORNER:
ELEVATION = 5471.64

SURVEYOR: SOUTHWEST SURVEYING, SEPTEMBER, 1999.

FLOOD ZONE DESIGNATION: NO PORTION OF THIS SITE LIES WITHIN A FLOOD PLAIN AS DESIGNATED ON PANEL No's 366 & 367 OF THE FEMA FLOOD INSURANCE RATE MAPS DATED SEPTEMBER 20, 1996.

HYDROLOGY: PRECIPITATION ZONE: 3
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Q_{100} = (2.00 AC)(2.6 CFS/AC) = 5.2 CFS
EXISTING RUNOFF SHEET FLOWS WEST TO EUBANK BLVD. SE.

PROPOSED CONSTRUCTION INCLUDES THE 12,000 SF BUILDING, ASSOCIATED PAVED PARKING, AND XERISCAPE AS SHOWN. THE FOLLOWING CALCULATIONS ARE BASED ON DEVELOPMENT OF BOTH LOTS.

LAND TREATMENT: 5% B
10% C & 85% D

Q_{100} = (0.1)(2.6) + (0.2)(3.45) + (1.7)(5.02) = 9.5 CFS
(Q_A = 5.0 CFS & Q_B =4.5 CFS)
BASIN A DRAINS TO A PROPOSED INLET IN THE NW CORNER OF THE PARKING AREA WHERE IT WILL TIE TO A CATCH BASIN IN DEVELOPMENT ROAD. BASIN B DRAINS TO THE SW CORNER OF THE PARKING AREA AND IS DISCHARGED TO EUBANK BLVD. SE.

BASIN 'A' INLET CAPACITY (ORIFICE EQUATION)
A = 4.7 SF (@50% CLOGGED → A = 2.3 SF)
Q = (0.67)(2.3) $\sqrt{32.2}$ = 8.7 CFS (OK)

BASIN 'B' SW CULVERT CAPACITY (MANNING EQUATION)
FOR 6" DEPTH: Q = (1.486/.017)(1.00)(0.481)(0.14)
Q = 5.9 CFS (OK)

RECEIVED OCT 05 2000 HYDROLOGY SECTION

LEGEND

5200	EXISTING CONTOUR
52	PROPOSED CONTOUR
52	FUTURE CONTOUR
75.5	EXISTING SPOT ELEVATION
78.3	PROPOSED SPOT ELEVATION
TC 74.8 / FL 74.3	TOP OF CURB / FLOWLINE ELEVATION
73.34	AS-BUILT ELEVATION
	FUTURE FLOW ARROW
	FLOW ARROW
	DRAINAGE BASIN BOUNDARY
	EXISTING CURB & GUTTER
	PROPOSED CURB & GUTTER
	PROPOSED CURB
	FUTURE 18" DRAINAGE OPENING
	SIDEWALK CULVERT
CO	SANITARY SEWER CLEANOUT TO GRADE

PUBLIC R.O.W. CONSTRUCTION NOTES

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EASEMENT DATA

1. EXISTING 27' PNM EASEMENT
2. EXISTING 40' PUBLIC DRAINAGE EASEMENT
3. EXISTING 10' PUBLIC UTILITY EASEMENT

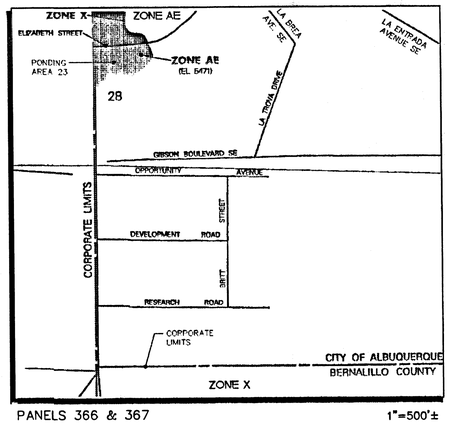
ENGINEER'S CERTIFICATION
I, SCOTT M. MCGEE, LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN DATED 12/06/99 (CITY APPROVAL LETTER DATED 02/03/00) AS FIELD VERIFIED BY SOUTHWEST SURVEYING, INC., NMLS NO. 6446 ON 10/03/00 IN ACCORDANCE WITH THE "NEW MEXICO ENGINEERING AND SURVEYING ACT" SECTION 61-23-1 THROUGH 61-23-32 NMSD (1978).

Scott M McGee
SCOTT M. MCGEE, NMPE NO. 10519

DATE 10/5/00

SCOTT M. MCGEE NEW MEXICO 10519 REGISTERED PROFESSIONAL ENGINEER

APPROVALS	NAME	DATE
HYDROLOGY		
INSPECTOR		
A.C.E./FIELD		
PERMIT NO.	MAP NO. M-21	



PANELS 366 & 367 1"=500'±

FLOOD ZONE MAP

RECEIVED OCT 05 2000 HYDROLOGY SECTION

TEAM
SPECIALTY PRODUCTS

GRADING, DRAINAGE & UTILITY PLAN

SCOTT M. MCGEE NEW MEXICO 10519 REGISTERED PROFESSIONAL ENGINEER
12/6/99

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque New Mexico

093GRD.DWGdlv | 12/06/99

C2

SHEET 1 OF 1

HYDROLOGY

(505) 924-3983

***

PLANS DISAPPROVED _____ DATE _____
PLANS APPROVED Whitney Reierson DATE 3/20/00

PLANS DISAPPROVED FOR THE FOLLOWING REASONS:

- [ ] Drainage report/plan required for new construction and for additions of 500 square feet or more to existing structures. See Section 14-5-2-12 of the City s Drainage Ordinance. **A pre-design conference with this office is recommended.**
- [ ] Follow procedures for drainage submittals as outlined on page 1, Section 17, Volume 1 of the City s Development Process Manual.
- [ ] **Attach a copy of the approved drainage report/plan to each set of building plans.**
- [ ] Pending approval of drainage report/plan submitted.

Field Inspected 10-16-00 (OK) Glenn Jorgensen

UPC, UMC, NEC

(505) 924-3957

CODE EDITIONS (YR.):
UPC 97 UMC 97 NEC 99

PLANS DISAPPROVED JW * JW JW DATE 4/17/00 * 5/8/00
PLANS APPROVED JW DATE 5/23/00

PLANS CORRECTIONS REQUIRED:
(INDICATE ORDINANCE SECTION REFERENCE)

John Sheets, Plans Reviewer, Phone: 924-3957
MEPREUBANK1400
04/18/00

~~1. Provide toilet fixture calcs. / UBC Appendix 29.~~

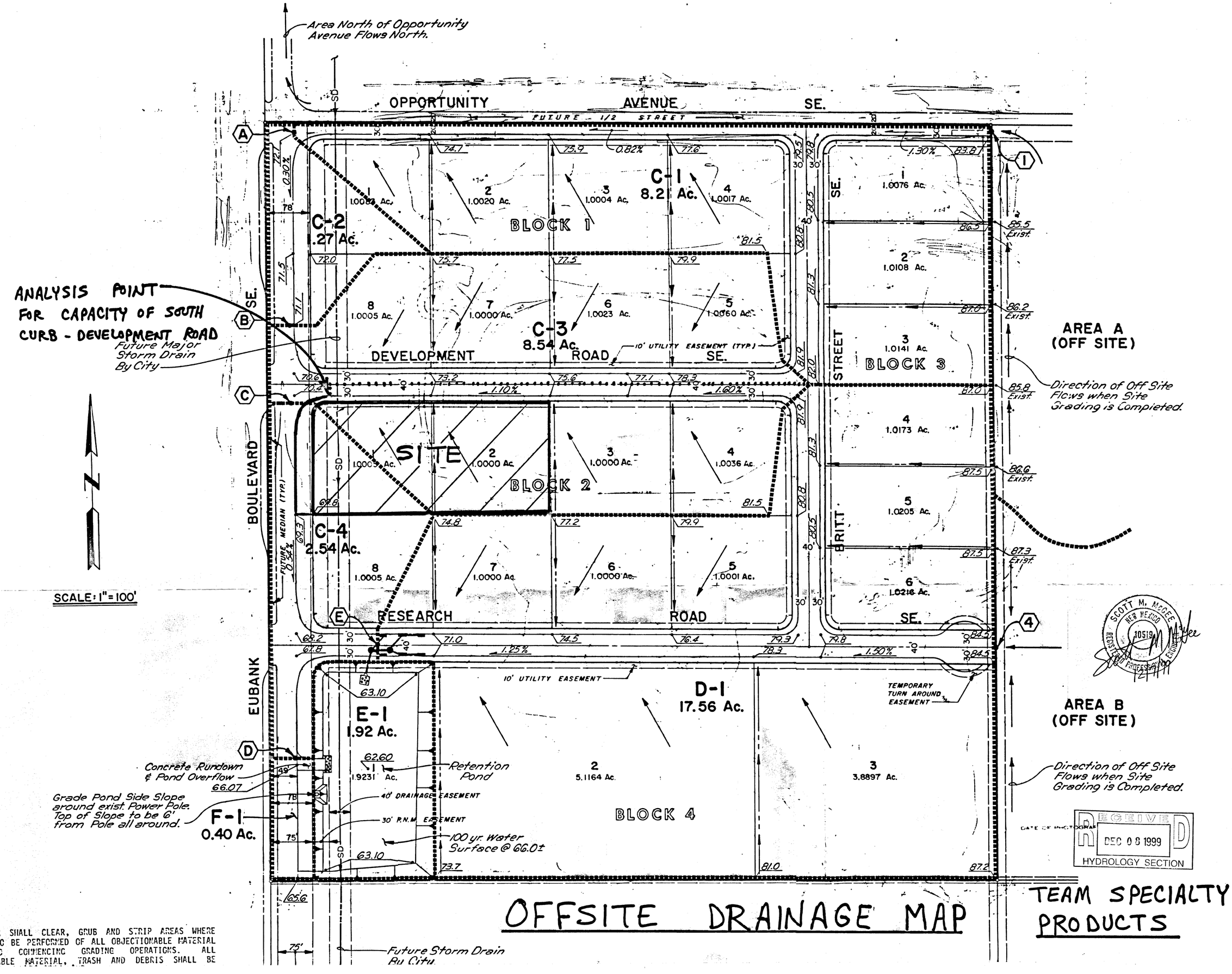
JW 2. Provide energy calcs. / MEC.

~~3. Provide roof / overflow drain details, line sizes, and routes / UBC 1506 and UPC Chapter 11.~~ 1. 1.

~~4. Provide MSDS's and amounts of chemical stored and used.~~

~~5. Explain the shop production processes.~~

JW Water heater to comply w/ UPC 511.2 and 608.5.

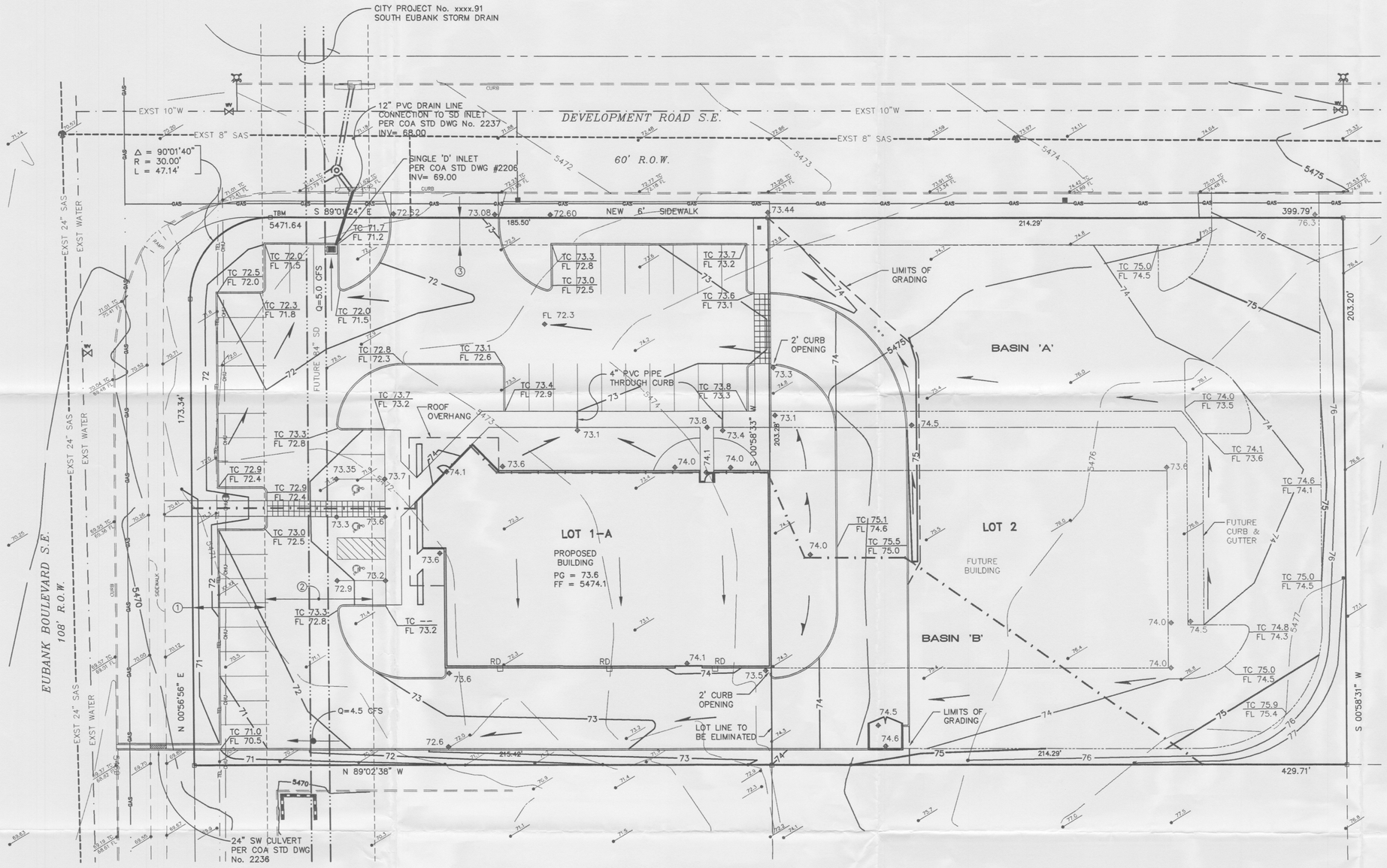


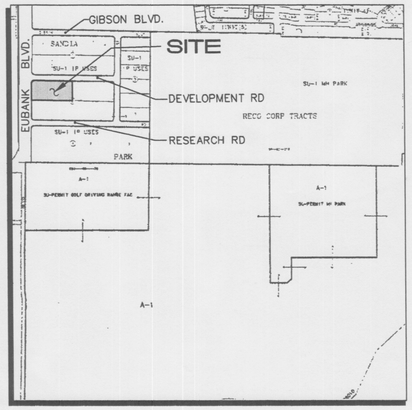
OFFSITE DRAINAGE MAP

TEAM SPECIALTY PRODUCTS

GRADING NOTES:

1. CONTRACTOR SHALL CLEAR, GRUB AND STRIP AREAS WHERE WORK IS TO BE PERFORMED OF ALL OBJECTIONABLE MATERIAL PRIOR TO COMMENCING GRADING OPERATIONS. ALL OBJECTIONABLE MATERIAL, TRASH AND DEBRIS SHALL BE





VICINITY MAP

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10% C & 85% D

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FOR 6" DEPTH: Q = (1.486/.017)(1.00)(0.481)(0.14)
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—— 52 ——	PROPOSED CONTOUR
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TC 74.8 / FL 74.3	TOP OF CURB / FLOWLINE ELEVATION
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APPROVALS	NAME	DATE
HYDROLOGY		
INSPECTOR		
A.C.E./FIELD		
PERMIT NO.	MAP NO. M-21	

PANELS 366 & 367 1"=500'±

FLOOD ZONE MAP

TEAM
SPECIALTY PRODUCTS

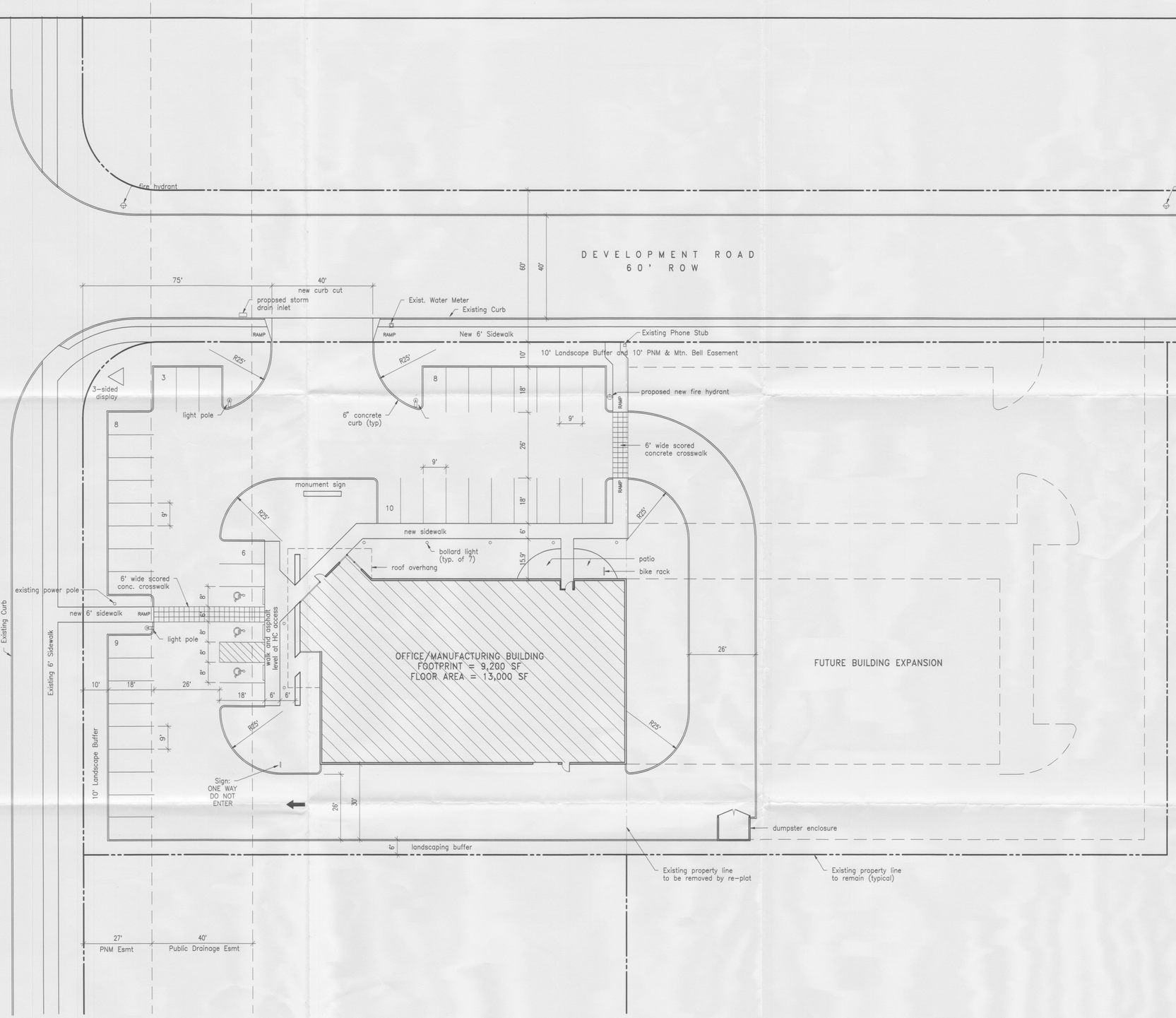
GRADING, DRAINAGE & UTILITY PLAN

SCOTT M. McGEE NEW MEXICO 10519 REGISTERED PROFESSIONAL ENGINEER 12/6/99

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque New Mexico

093GRD.DWGdlv 12/06/99

SHEET 1 OF 1



SITE PLAN

SCALE: 1" = 20'

NORTH

0 10 20 30 40 50

Note: See Grading and Drainage plan for utilities information.
See Elevations for signage and light fixtures.

ZONE ATLAS PAGE: M-21-Z

SCALE: 1" = 750'

Site Area: 2 acres
Zoning SU-1 for IP
Building Footprint: 9200 sf (2 story)
Building Floor Area: 13,000 sf
FAR: .21 (based on 1 acre)
Zone Atlas Map M-21
Lots 1-A and 2 of Block 2
of Sandia Research Park
(to be re-platted as one lot)

Parking Spaces Required:

Office, 1st floor	5000 sf / 200 =	25
Office, 2nd floor	3800 sf / 300 =	13
Manufacturing	4200 sf / 1000 =	4
sub-total		42
10% bus credit		-4
total		38
bicycle parking	38 / 20 =	2

Parking Provided: 44

This plan is consistant with the specific Development Plan approved by the Environmental Planning Commision

on: _____

EPC CASE # Z-99-122

DRB CASE # _____

Planning Director — Date
Approved as to the requirements

Traffic Engineer — Date

AMAFCA — Date

Parks and General Services — Date

City Engineer — Date

Water Resources, Utilities Division — Date

ALEXANDER HARRISON
A R C H I T E C T
8605 Mountain Road NE, Albuquerque, NM 87112, 299-6322

RECEIVED DEC 07 1999 HYDROLOGY SECTION

STATE OF NEW MEXICO ALEXANDER HARRISON 1507 REGISTERED ARCHITECT

11/29/99

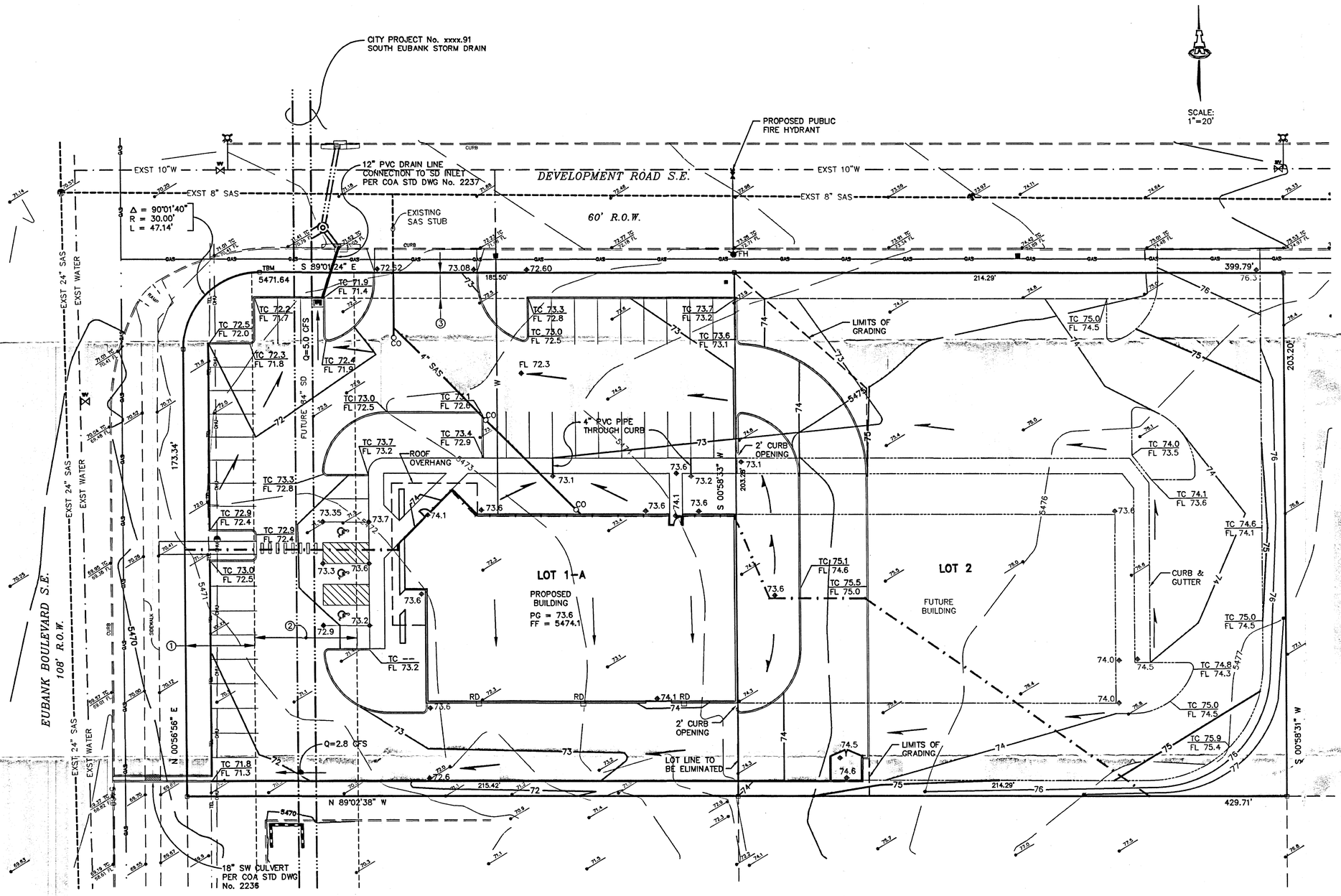
proj: 9908 drwn: AH chkd: AH
file: 1PROJECT\TEAM99\EPC-SITE

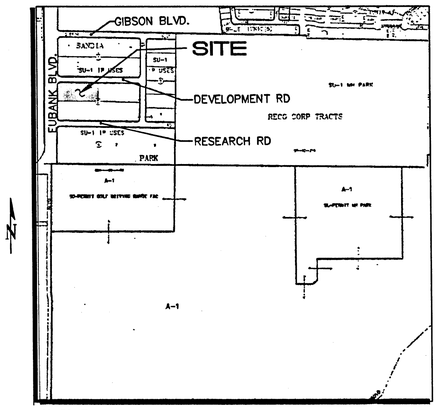
date: September 24, 1999
revisions: EPC Conditions, Nov. 30, 1999

Team Specialty Products
Albuquerque, New Mexico

EPC SITE PLAN

sheet number 1 of 2 sheets





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10% C & 50% D

$Q_{100} = (0.8)(2.6) + (0.2)(3.45) + (1.0)(5.02) = 7.8\ CFS$
$(Q_A = 5.0\ CFS\ \&\ Q_B = 2.8\ CFS)$

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RECEIVED SEP 24 1999 HYDROLOGY SECTION

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ISAACSON & ARFMAN, P.A.
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128 Monroe Street N.E.
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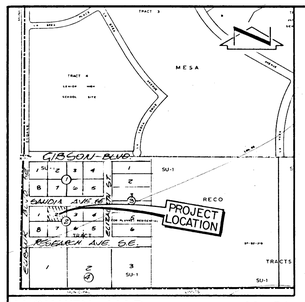
093GRD.DWGrfh | 09/23/99

SHEET 1 OF 1



VICINITY MAP M-21

SCALE : 1" = 800'

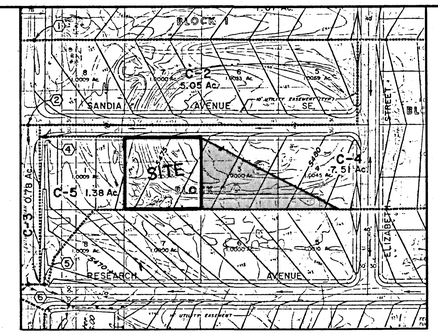
LEGEND

- 74.5 — EXISTING CONTOUR
- 74.8 EXIST. SPOT ELEVATION
- 75 — PROPOSED CONTOUR
- 75.4 PROPOSED SPOT ELEVATION
- PROPOSED SWALE
- PROPOSED CONCRETE
- PROPOSED ASPHALT

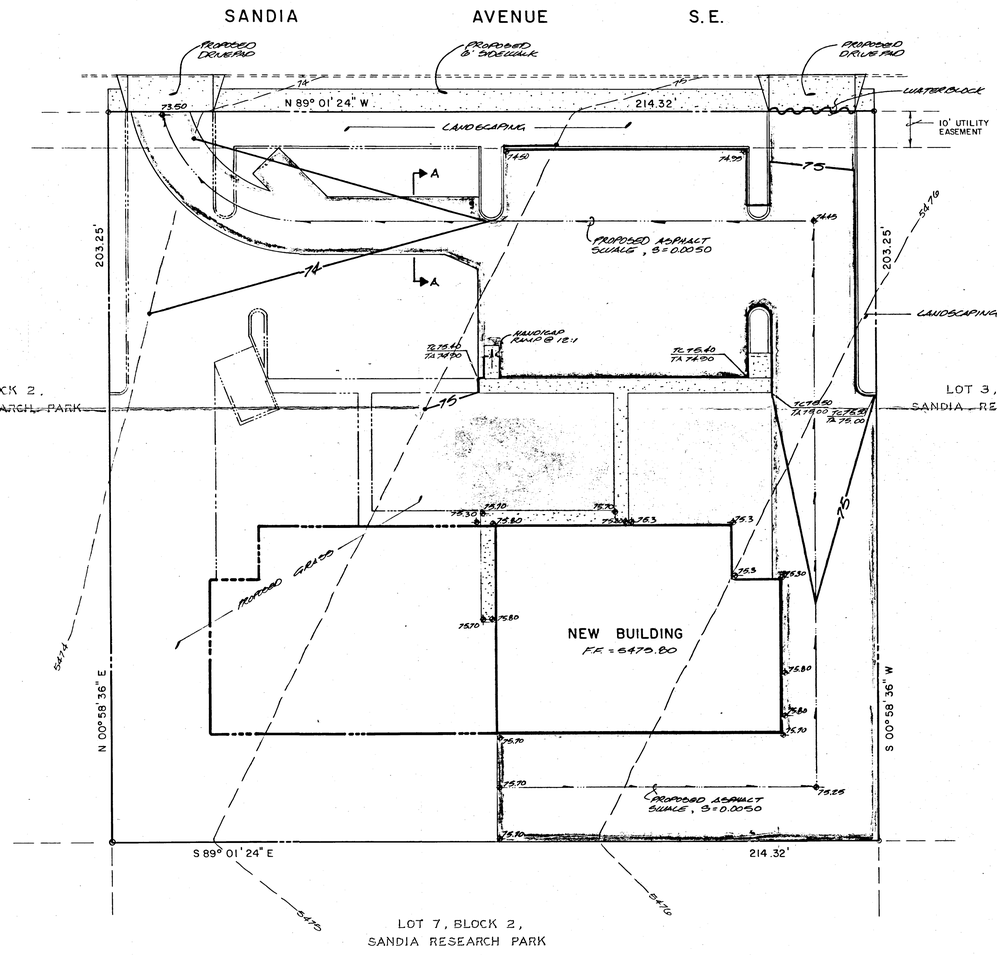
LEGAL DESCRIPTION

LOT 2, BLOCK 2, SANDIA RESEARCH PARK

SCALE : 1" = 20'

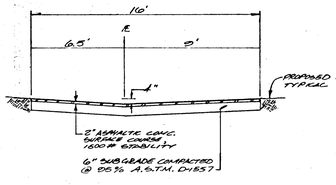


OFF-SITE CONTRIBUTING AREA



INTERIM CONDITIONS of MASTER PLAN LIMIT Q_P to 3.24cfs/ac

V_{100} to 3915.5 A^3/ac



SECTION A-A

SCALE : 1" = 5'

⚠ DRAINAGE PLAN

The following items concerning the Electronic Research Facility Conceptual Grading and Drainage Plan are contained hereon:

1. Vicinity Map
2. Grading Plan
3. Calculations

As shown by the Vicinity Map, the site is located adjacent to Sandia Avenue SE east of Eubank Boulevard SE. At present, the site is undeveloped. Much of the surrounding area is also undeveloped. The proposed improvements consist of the addition of a building, paving, and landscaping.

As shown by Panel 37 of the Federal Emergency Management Agency Flood Boundary and Floodway Map, dated October 14, 1983, this site does not lie within a designated Flood Hazard Zone. Furthermore, this site does not appear to contribute runoff to a flood hazard area. Based on the drainage report prepared by Andrews, Asbury & Roberts, Inc. for the Sandia Research Park, dated January, 1988, the free discharge of runoff from this site is appropriate.

The Grading Plan shows 1) existing and proposed grades indicated by spot elevations and contours at 1'0" intervals, 2) continuity between existing and proposed grades, and 3) the limit and character of the proposed improvements. As shown by this plan, the runoff generated from the proposed improvements will be directed in an asphalt swale to a proposed drivepad at the northwest corner of the site. The runoff will then be discharged into Sandia Avenue SE via the drivepad. As stated in the above noted drainage report, the runoff will drain west to Sandia Avenue SE and then south on the east side of Eubank Boulevard SE to a pond located in the southwest corner of the Sandia Research Park. The site generally drains from east to west. No offsite flows are anticipated from the north, south or west. Some offsite flows are anticipated to enter the site from the east and have been quantified in the calculations. The offsite flows entering the site will be directed through the site via the asphalt swale described above. Due to the allowable peak rate of discharge (C = 0.80) and the allowable volume of runoff (3,900 ac-ft per acre), the development of Phase II shall be deferred until at which time the downstream facility is improved.

The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The Rational Method has been used to quantify the peak rate of discharge and the SCS Method has been used to quantify the volume of runoff. Both Methods have been used in accordance with the City of Albuquerque Development Process Manual, Volume II, and the Mayor's Emergency Rule adopted January 14, 1986. As shown by these calculations, the proposed improvements will result in a net increase in peak runoff by 0.7 cfs.

⚠ CALCULATIONS

Ground Cover Information

From SCS Bernalillo County Soil Survey,
Plate 32: MWA - Madurez - Wink Association
Hydrologic Soil Group: B
Existing Pervious CN = 79 (DPM Plate 22.2 C-2
Pasture or Range Land: poor condition)
Developed Pervious CN = 61 (DPM Plate 22.2 C-2
Open Spaces: good condition)

Time of Concentration/Time to Peak

$T_C = 0.0078\ L^{0.77}/S^{0.385}$ (Kirpich Equation)

$T_P = T_C = 10$ min.

Point Rainfall

P_6 = 2.43 in. (DPM Plate 22.2 D-1)

Rational Method

Discharge: Q = CiA

where C varies
$i = P_6\ (6.84)\ T_C^{-0.51} = 5.14$ in/hr
P_6 = 2.43 in (DPM Plate 22.2D-1)
T_C = 10 min (minimum)
A = area, acres

SCS Method

Volume: V = 3630(DRO) A

Where DRO = Direct runoff in inches
A = area, acres

Existing Condition

A_{total} = 43,560 sf = 1.0 Ac
Undeveloped area = 43,560 sf (1.0)
C = 0.40 (Weighted average per Emergency Rule, 1/14/86)
Q_{100} = CiA = 0.40(5.14)1.0 = 2.1 cfs
A_{imp} = -0- sf; % impervious = -0-%
Composite CN = 79 (DPM Plate 22.2 C-3)
DRO = 0.79 in (DPM Plate 22.2 C-4)
V_{100} = 3630 (DRO)A = 2,870 cf

Developed Condition Phase I

A_{total} = 43,560 sf = 1.0 Ac
Roof area = 4,360sf (0.10)
Paved area = 14,570 sf (0.33)
Landscaped area = 24,630 sf (0.57)
C = 0.55 (Weighted average per Emergency Rule, 1/14/86)
Q_{100} = CiA = 0.55(5.14)1.0 = 2.8 cfs
A_{imp} = 18,930 sf; % impervious = 43 %
Composite CN = 77 (DPM Plate 22.2 C-3)
DRO = 0.70 in (DPM Plate 22.2 C-4)
V_{100} = 3630(DRO) A = 2540 cf

Developed Condition Phase I Ult.
(Including 1/2 of the street)

A_{total} = 49,990 sf = 1.148 Ac
Roof area = 4,360sf (0.09)
Paved area = 20,550 sf (0.41)
Landscaped area = 25,080 sf (0.50)
C = 0.60 (Weighted average per Emergency Rule, 1/14/86)
Q_{100} = CiA = 0.60(5.14)1.148 = 3.5 cfs
A_{imp} = 24,910 sf; % impervious = 50 %
Composite CN = 80 (DPM Plate 22.2 C-3)
DRO = 0.84 in (DPM Plate 22.2 C-4)
V_{100} = 3630(DRO) A = 3,800 cf

Developed Condition Phase I & II

A_{total} = 43,560 sf = 1.0 Ac
Roof area = 8,720 sf (0.20)
Paved area = 26,400 sf (0.61)
Landscaped area = 8,440 sf (0.19)
C = 0.81 (Weighted average per Emergency Rule, 1/14/86)
Q_{100} = CiA = 0.81(5.14)1.0 = 4.2 cfs
A_{imp} = 35,120 sf; % impervious = 81 %
Composite CN = 91 (DPM Plate 22.2 C-3)
DRO = 1.55 in (DPM Plate 22.2 C-4)
V_{100} = 3630(DRO) A = 5630 cf

Offsite Contributing Area

A_{total} = 39,000 sf = 0.89 Ac
C = 0.40 (Weighted average per Emergency Rule, 1/14/86)
Q_{100} = CiA = 0.40(5.14)0.89 = 1.8 cfs
A_{imp} = -0- sf; % impervious = -0-%
Composite CN = 79 (DPM Plate 22.2 C-3)
DRO = 0.8 in (DPM Plate 22.2 C-4)
V_{100} = 3630(DRO) A = 2900 cf

Comparison

ΔQ_{100} = 2.8 - 2.1 = 0.7 cfs (increase)
ΔV_{100} = 4540 - 2870 = 1670 cf (increase)

Section A-A

Manning Equation

$Q = \frac{1.49}{n} AR^{2/3} S^{1/2}$

Where n = 0.017
A = 2.67 sf
wp = 16.01 ft
R = A/wp = 0.17 ft
S = 0.005 ft/ft

$Q = \frac{1.49}{0.017}(2.67)(0.17)^{2/3}(0.005)^{1/2}$
= 5.0 cfs > $Q_{required}$ = 2.8 + 1.8 = 4.6 cfs

CONSTRUCTION NOTES:

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 766-1234, FOR LOCATION OF EXISTING UTILITIES.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
4. ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.
5. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.

EROSION CONTROL MEASURES

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AT THE PROPERTY LINES AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
2. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
3. THE CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" PRIOR TO BEGINNING CONSTRUCTION.

RECEIVED JUN 17 1988 HYDROLOGY SECTION

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER

05-27-88
06-17-88

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CONCEPTUAL
GRADING AND DRAINAGE PLAN

ELECTRONIC RESEARCH FACILITY

DESIGN BY	P.M.L.
DRAWN BY	C.V.M.
APPROVED BY	J.G.M.

No.	Date	By	Revision
1	17 JUNE 88	P.M.L.	REVISE VERBIAGE & CALCULATIONS

JOB NO.	880571
DATE	05-1988
SHEET	3 OF 3