

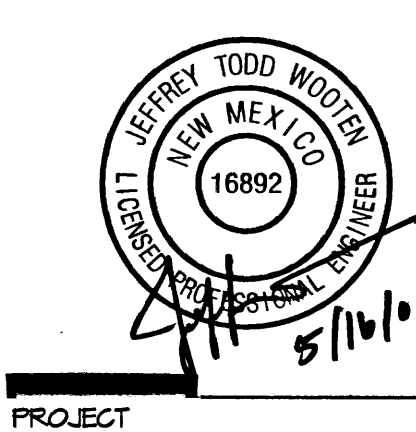
**Dekker
Perich
Sabatini**

6801 Jefferson NE
Suite 100
Albuquerque, NM 87109
505 761-9700
fax 761-4222
dps@dpsobg.com

ARCHITECT

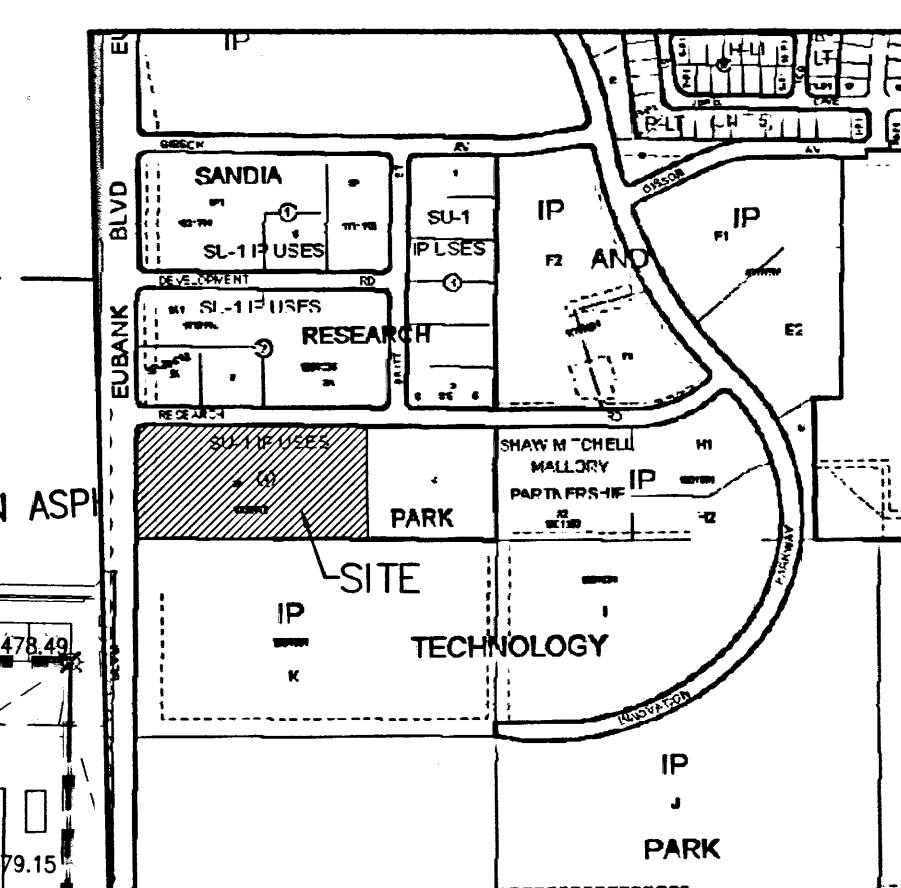
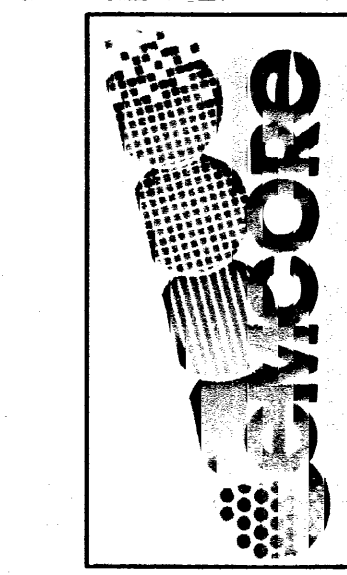
ISSUED FOR
CONSTRUCTION

ENGINEER



PROJECT

Building 1 - Phase 4 Addition
10420 Research Park Road SE
Albuquerque, New Mexico 87123



VICINITY MAP
COA ZONE ATLAS PAGE M-21-Z

LEGEND

- PROPERTY LINE
- - - - - EXISTING CONTOUR
- - - - - PROPOSED INDEX CONTOUR
- - - - - PROPOSED INTERMEDIATE CONTOUR
- o EXISTING SPOT ELEVATION
- o PROPOSED SPOT ELEVATION
- FL = FLOWLINE
- TS = TOP OF SIDEWALK
- FSH = FINISHED GROUND HIGH SIDE
- FLS = FINISHED GROUND LOW SIDE
- TW = TOP OF WALL
- DIRECTION OF FLOW

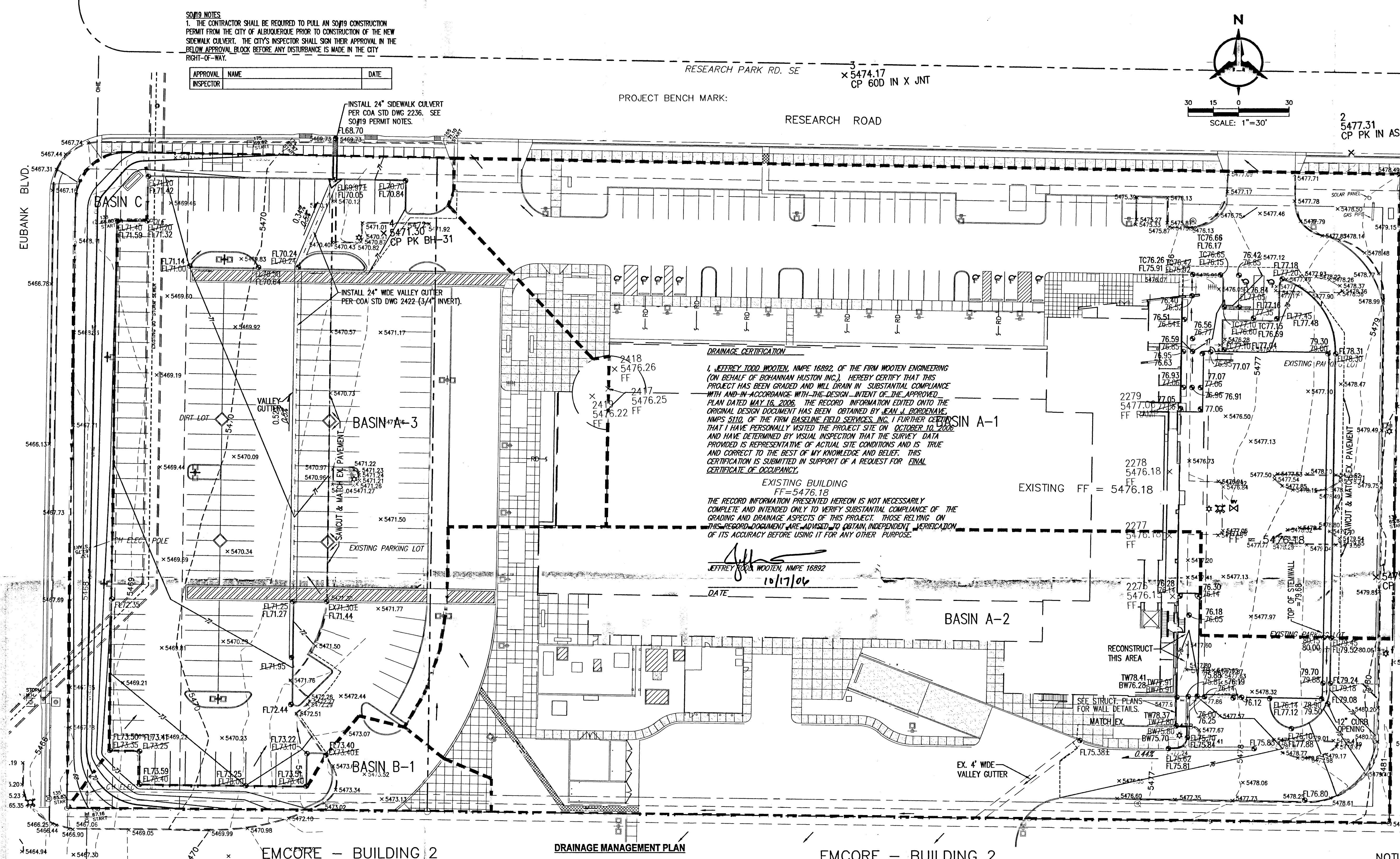
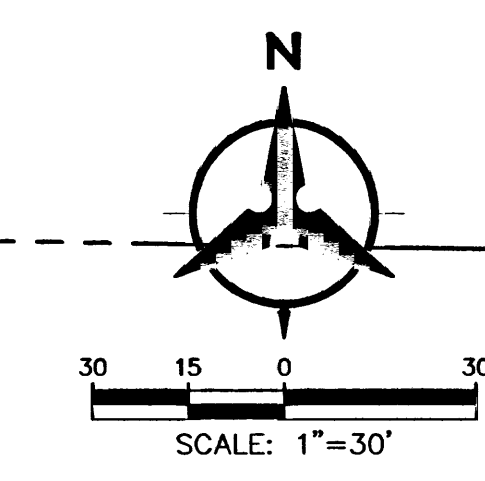
SOI#19 NOTES
1. THE CONTRACTOR SHALL BE REQUIRED TO OBTAIN A SOI#19 CONSTRUCTION PERMIT FROM THE CITY OF ALBUQUERQUE PRIOR TO CONSTRUCTION OF THE NEW SIDEWALK CULVERT. THE CITY'S INSPECTOR SHALL SIGN THEIR APPROVAL IN THE BELOW APPROVAL BLOCK BEFORE ANY DISTURBANCE IS MADE IN THE CITY RIGHT-OF-WAY.

| APPROVAL | NAME | DATE |
|-----------|------|------|
| INSPECTOR | | |

PROJECT BENCH MARK:

RESEARCH PARK RD. SE
x 5474.17
CP 600 IN X JNT

RESEARCH ROAD



DRAINAGE CERTIFICATION
I, JEFFREY TODD WOOTEN, NMPE 16892, OF THE FIRM WOOTEN ENGINEERING (ON BEHALF OF BOHANNAN HUSTON INC.), HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED MAY 16, 2006. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY JEFFREY TODD WOOTEN, NMPE 16892, OF THE FIRM WOOTEN ENGINEERING, INC. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON OCTOBER 10, 2006, AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR FINAL CERTIFICATE OF OCCUPANCY.

EXISTING BUILDING
FF=5476.18
THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

Jeffrey Todd Wooten, NMPE 16892
DATE 10/17/06

GRADING NOTES

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- VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION PRIOR TO BEGINNING CONSTRUCTION.

DRAINAGE MANAGEMENT PLAN

I. INTRODUCTION
The purpose of this submittal is to provide a Drainage Management Plan for Phase 4 Development of Emcore located in SE Albuquerque. This phase of development includes a +/-17,000 square foot building addition and a new addition to the parking lot located at the west side of the property.

II. SITE LOCATION
The site is currently legally described as Lot 2A, Block 4 of Sandia Research Park (+/- 7.0 acres). The site is located within zone atlas map #M-21, and is in hydrologic zone 3. The site is located at the southeast corner of Eubank and Research Rd.

III. EXISTING HYDROLOGIC CONDITIONS
Currently the site (7.0 ac) is developed as Emcore (through Phase 3). The surrounding streets and infrastructure are in place. For the most part, Drainage from the site flows north to Research Road and ultimately into the Eubank storm drain system (90' RCP). Per the approved Manzano Mesa Master Drainage Study by Smith Engineering Company (August 1996), this fully developed site is allowed to drain into the 90' SD along Eubank via the curb inlets located in Research.

IV. PROPOSED HYDROLOGIC CONDITIONS
The proposed conditions for the project are shown on this Grading Plan. The hydrologic analysis for this area is based on drainage requirements for the 100-yr, 6-hr storm event. The total site (+/- 7.0 acres) will generate a total of 34.18 cfs under newly developed conditions and consists of approximately 90% D land treatment. Basins A-1, A-2, and A-3 (32.37 cfs) will drain to Research Road and enter the Eubank Storm drain system through existing curb inlets in Research. Basins B-1 (0.74 cfs) will continue to drain to the south onto the Emcore - Building 2 site. Basin C (1.06 cfs) will sheet flow into Eubank and into the existing curb inlet located near the south end of the subject site along Eubank.

V. CONCLUSION
This drainage management plan provides for grading and drainage elements which are capable of safely passing the 100 year storm and which meet city requirements and are in conformance with the previously approved Manzano Mesa Master Drainage Study. With this submittal we are requesting building permit approval.

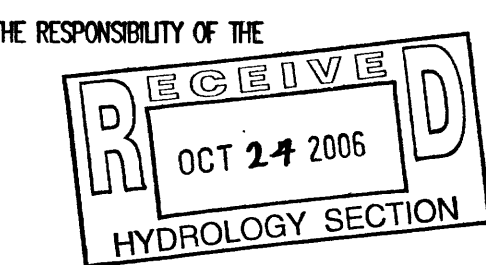
EMCORE - BUILDING 2

EMCORE - PHASE 4 EXPANSION
Proposed Conditions Basin Data Table

| This table is based on the DPM Section 22.2, Zone: 3 | | | | | | | | | | |
|--|---------------|-------------|----------------------------|------|-------|-------|-------------|--------------|----------|-----------------------|
| BASIN | Area | Area | Land Treatment Percentages | | | | Q(100) | Q(100) | WT E | V(100) ₃₆₀ |
| ID | (SQ. FT) | (AC.) | A | B | C | D | (cfs/ac.) | (csf) | (inches) | (CF) |
| PROPOSED CONDITIONS | | | | | | | | | | |
| A-1 | 116108 | 2.67 | 0.0% | 0.0% | 10.0% | 90.0% | 4.86 | 12.96 | 2.25 | 21799 |
| A-2 | 89859 | 2.06 | 0.0% | 0.0% | 10.0% | 90.0% | 4.86 | 10.03 | 2.25 | 16871 |
| A-3 | 84053 | 1.93 | 0.0% | 0.0% | 10.0% | 90.0% | 4.86 | 9.38 | 2.25 | 15781 |
| B-1 | 6718 | 0.15 | 0.0% | 0.0% | 15.0% | 85.0% | 4.78 | 0.74 | 2.20 | 1231 |
| C | 9840 | 0.23 | 0.0% | 0.0% | 20.0% | 80.0% | 4.71 | 1.06 | 2.15 | 1760 |
| TOTAL | 306578 | 7.04 | - | - | - | - | 4.86 | 34.18 | | 57442.33 |
| | | | | | | | | | | 110074 |

NOTICE TO CONTRACTORS

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Bohannon & Huston
Courtney 1 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING • SPATIAL DATA • ADVANCED TECHNOLOGIES

SHEET NO.

C100
OF

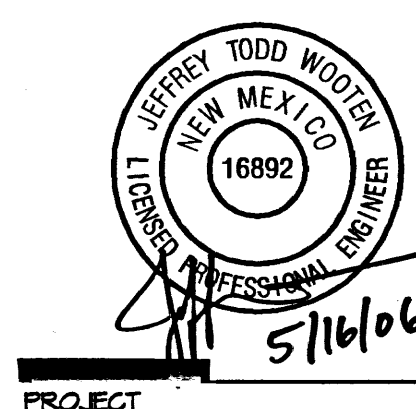
**GRADING &
DRAINAGE PLAN**

**Dekker
Perich
Sabatini**

6801 Jefferson NE
Suite 100
Albuquerque, NM 87109
505 761-9700
fax 761-4222
dps@dpsabq.com

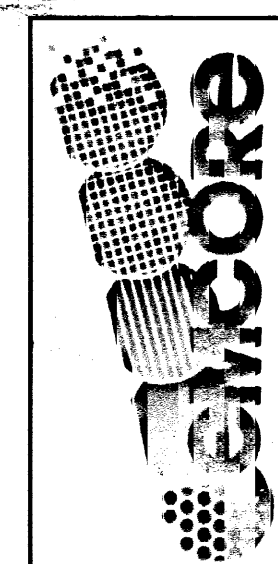
ARCHITECT

ENGINEER



PROJECT

Phase 4 - Building 1 Addition
10420 Research Road SE
Albuquerque, New Mexico 87123



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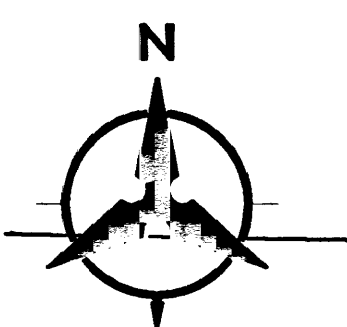
| APPROVAL | NAME | DATE |
|-----------|------|------|
| INSPECTOR | | |

INSTALL 24" SIDEWALK CULVERT PER COA STD DWG 2236. SEE SO#19 PERMIT NOTES.

INSTALL 24" WIDE VALLEY GUTTER PER COA STD DWG 2422 (3/4" INVERT).

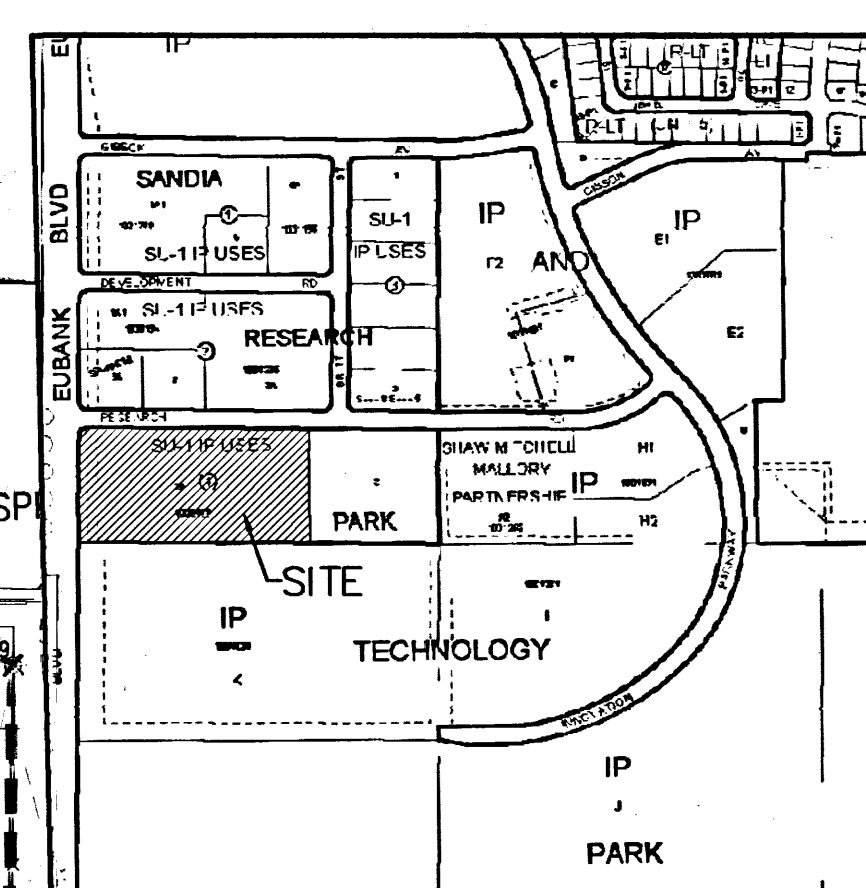
RESEARCH PARK RD. SE
CP 600 IN X JNT
5474.17

RESEARCH ROAD



SCALE: 1"=30'

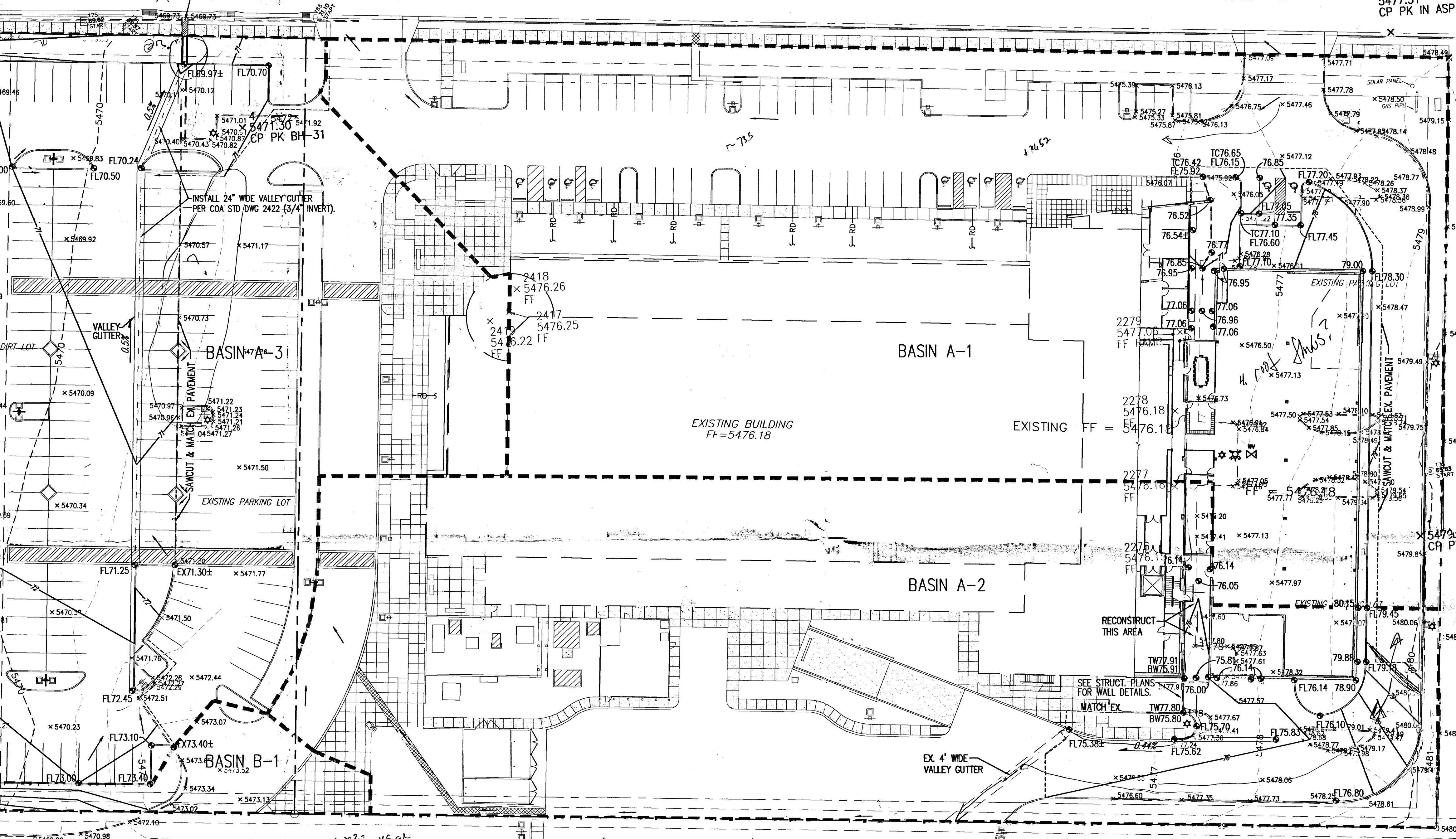
2 5477.31
CP PK IN ASP



VICINITY MAP
COA ZONE ATLAS PAGE M-21-Z

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EMCORE - BUILDING 2

DRAINAGE MANAGEMENT PLAN

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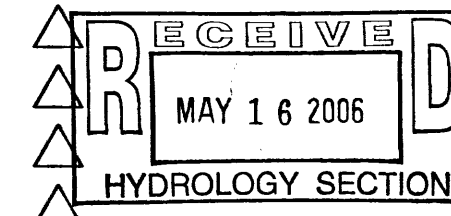
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Bohannon & Huston
Court yard 1 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING • SPATIAL DATA • ADVANCED TECHNOLOGIES

REVISIONS



DRAWN BY: BO
REVIEWED BY: JTW
DATE: APRIL 21, 2006
PROJECT NO.:
DRAWING NAME:

**GRADING &
DRAINAGE PLAN**

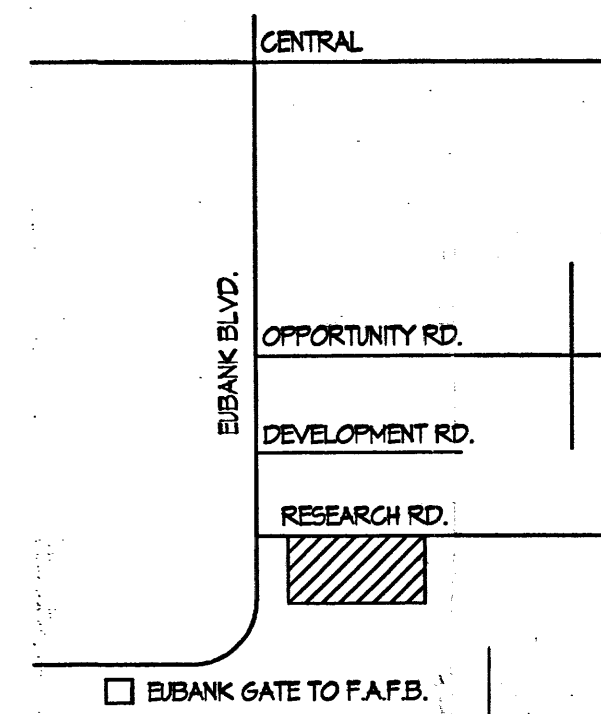
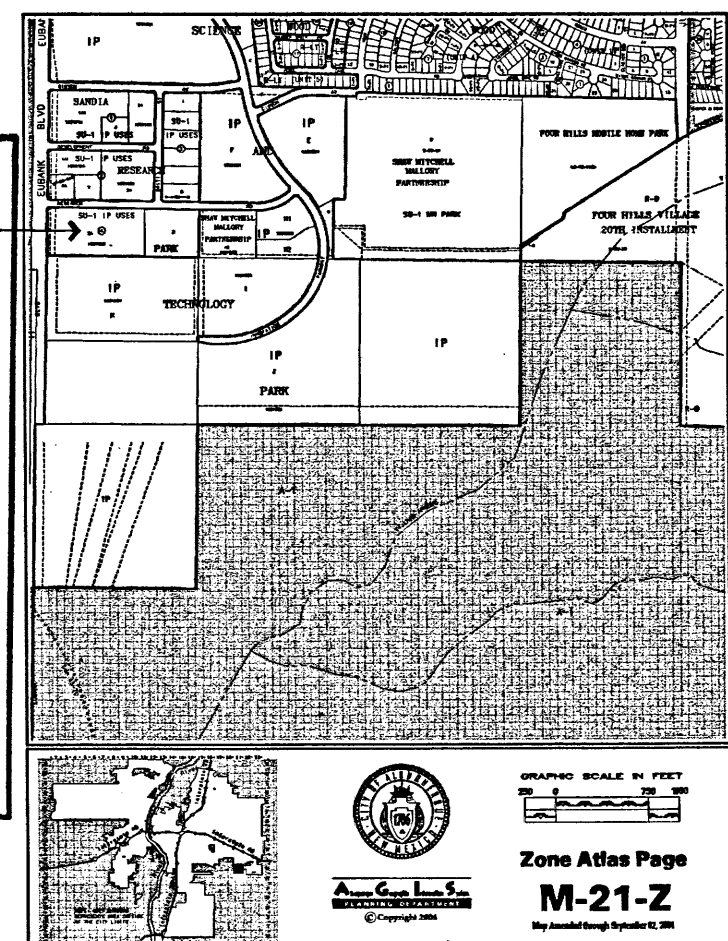
SHEET NO.

C100
OF

ADMINISTRATIVE AMENDMENT

File #1444-0032 Project #1000613
17,000 S.F. addition.

APPROVED BY
DATE
12/15/06



PARKING CALCULATIONS

NOTE: PARKING CALCULATIONS ARE BASED ON COMPLETION OF BOTH PHASE 1 & PHASE 2 CONSTRUCTION.

EXISTING REQUIRED PHASE 1:
MANUFACTURING 20 (13 EMPLOYEES, 60 EMPLOYEES/SHIFT)
OFFICE 35 (1,000S.F. @ 1:200S.F.)

EXISTING REQUIRED PHASE 2:
MANUFACTURING 20 (13 EMPLOYEES, 60 EMPLOYEES/SHIFT @ 12,445S.F. @ 1:1000S.F.)
OFFICE 10 (13,845S.F. @ 1:200S.F.)

NEW REQUIRED PHASE 3:
MANUFACTURING 11 (11,000 S.F. @ 1:1000S.F.)

TOTAL REQ'D 162 SPACES
H.C. 8 SPACES (2 VAN ACCESSIBLE)

TOTAL PROVIDED 238 SPACES
H.C. 10 SPACES (2 VAN ACCESSIBLE)

SITE DATA

LOT DESCRIPTION: LOT 1 AND LOT 2 IN BLOCK 4 SANDIA RESEARCH PARK, AS THE SAME ARE SHOWN AND DESIGNATED ON THE PLAT THEREOF, FILED IN THE OFFICE OF THE BERNALILLO COUNTY, NEW MEXICO ON MAY 8, 1988 IN BOOK C36, PAGE 115.

TOTAL LOT AREA: 1.04 ACRES 306,641 S.F.

CURRENT SITE ZONING: M-1 P

BUILDING DATA

PHASE 1
50,000 S.F. ONE STORY MANUFACTURING WITH SUPPORTING OFFICES. TYPE I-N CONSTRUCTION, SPRINKLERED. OCCUPANCY TYPE H-6.

PHASE 2
50,000 S.F. TWO STORY MANUFACTURING WITH SUPPORTING OFFICES. TYPE I-N CONSTRUCTION, SPRINKLERED. OCCUPANCY TYPE H-6.

PHASE 3
BUILDING 2 - NOT PART OF THIS PROJECT.

PHASE 4
17,000 S.F. ONE STORY MANUFACTURING WITH SUPPORTING CONF. ROOM, RESTROOMS. TYPE I-N CONSTRUCTION, SPRINKLERED. OCCUPANCY TYPE S-2.

GENERAL NOTES

- RADI CENTER POINTS TO BE LOCATED BY MEASURING PERPENDICULAR TO THE ADJACENT STRAIGHT CURB LINE.
- DIMENSIONS ARE TO FACE OF CURB.
- IF LAYOUT DIFFERS SIGNIFICANTLY FROM CIVIL DRAWINGS, NOTIFY ARCHITECT IMMEDIATELY.

KEYED NOTES

- STRIPED PEDESTRIAN CROSSINGS, PAINT: WHITE
- SIDEWALK WITH CONTROL JOINTS EVERY 5'-0". SEE DETAIL D4/A041.
- MONUMENT SIGN, SEE DETAIL C4/A041.
- LIGHT POLES, REFER TO ELECTRICAL DRAWINGS AND E2/A041 & C5/A041.
- ASPHALTIC PAVING OVER PREPARED SUBGRADE, REFER TO CIVIL
- ACCESSIBLE SIDEWALK RAMP, REF. TO D3/A041
- LANDSCAPED AREA, REF. TO LANDSCAPE PLANS
- CONCRETE WALK, REFER E4/A041.
- EXISTING LIGHT POLE TO REMAIN
- 3/8" CHECKERED STEEL PLATE DRAIN TRENCH COVER, REF. TO E5/A041.
- EXISTING POWER POLE TO REMAIN
- CUT THROUGH EXISTING PLANTER AND ADD CURBS TO ALLOW FOR ACCESSIBLE PEDESTRIAN ROUTE
- DEMOLISH EXISTING FENCE AND CONC. FOOTINGS
- RETAINING WALL, STUCCO TO MATCH BUILDING.
- REFER TO STRUCTURAL
- EXISTING CURB TO REMAIN
- NEW CURB AND GUTTER, REF. E3/A041.
- EXISTING BIKE RACK TO REMAIN
- CONCRETE BUMPER, TYP. OF 2
- H.C. PARKING SIGN, REFER TO E5/A041.
- ADA PAVEMENT SIGNAGE, REFER TO D5/A041.
- NEW FIRE HYDRANT, REFER TO CIVIL
- RELOCATED FIRE HYDRANT, REFER TO CIVIL
- 6" CONC. FILLED PIPE BOLLARD, REF. D2/A041, TYP. OF 5
- ASPHALT CURB ALONG PARKING STALLS FOR PEDESTRIAN CROSSING
- LABEL SPACE "SMALL CAR" PER COA STANDARDS.

Request For Administrative Amendment #6

Approved By DRB Case Number 98-54

Admin. Amend. #1 AA-98-66 dated 5/14/98 approved 5/21/98
Admin. Amend. #2 AA-98-132 dated 9/10/98 approved 9/24/98

Admin. Amend. #3 AA-001340000000838 dated 6/16/00 approved 6/21/00
Project #1000613

Admin. Amend. #4 AA-00236-00000-01000 dated 11/20/00 approved 12/15/00
Project #1000613

Admin. Amend. #5 AA-04AA-01401 dated 09/01/04 approved 10/13/04
Project #1000613

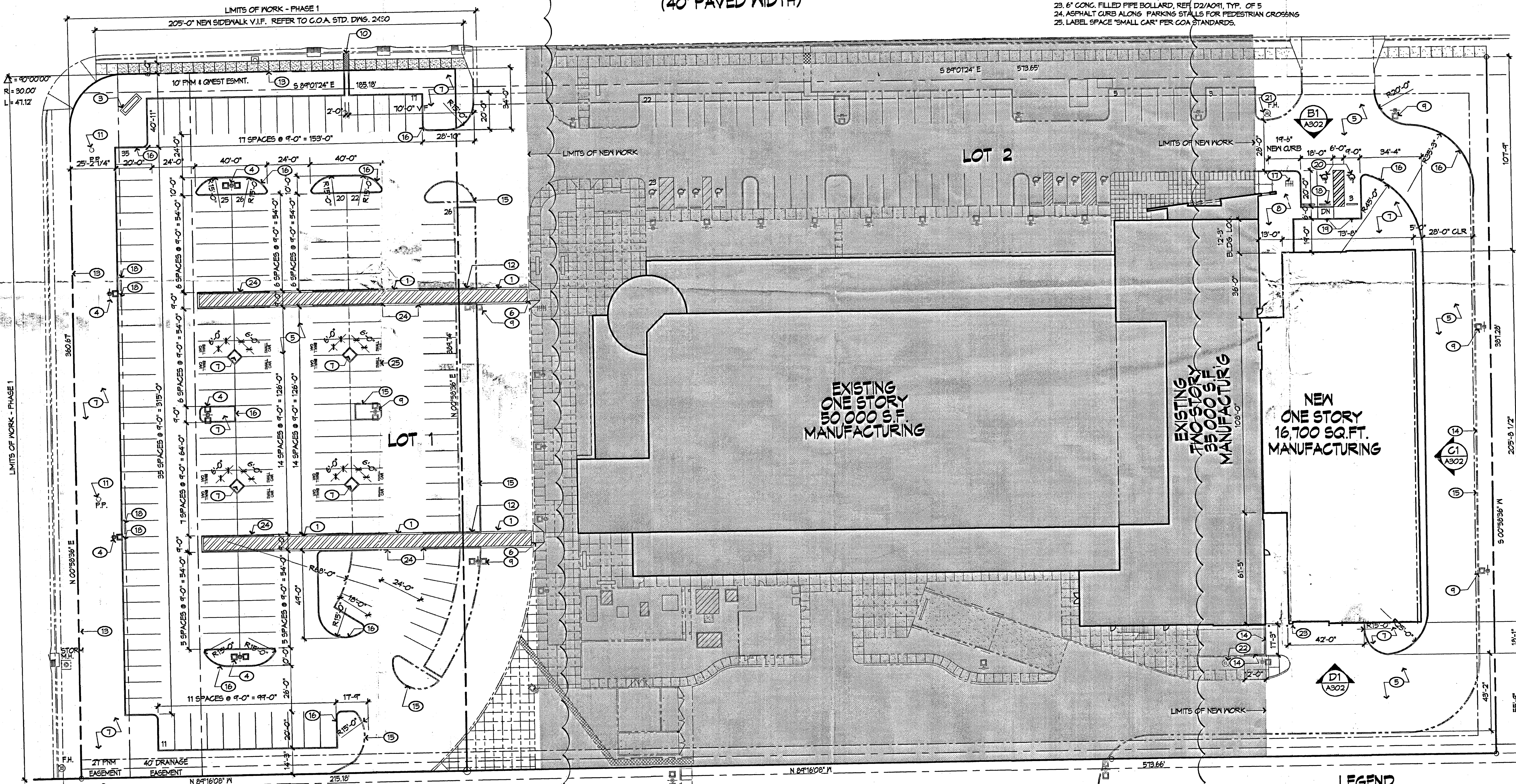
REQUESTED REVISIONS TO SITE PLAN:
ADD 17,000 SF BUILDING ADDITION AND ASSOCIATED PARKING LOT.

Symbols Legend

- POLE MOUNTED SITE LIGHTING, IV DOUBLE 16" CUT OFF, FORWARD THROWN 250M HPS FIXTURE REFER DETAIL THIS SHEET
- POLE MOUNTED SITE LIGHTING, IV SINGLE 16" CUT OFF, FORWARD THROWN 250M HPS FIXTURE REFER DETAIL THIS SHEET
- F. H. PRIVATE FIRE HYDRANT (U.N.O.)
- BIKE PARKING

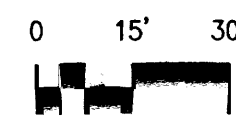
RESEARCH ROAD S.E. (60' R.O.W.)
(40' PAVED WIDTH)

EUBANK BOULEVARD S.E. (150' R.O.W.)



A1 SITE PLAN

1" = 30'-0"



LEGEND

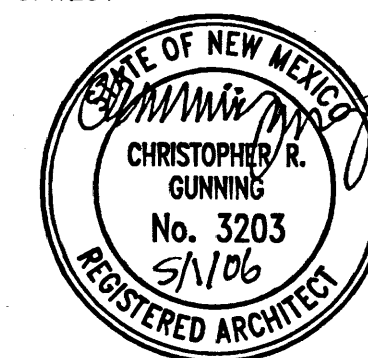
- POLE MOUNTED SITE LIGHTING, IV DOUBLE 16" CUT OFF, FORWARD THROWN 250M HPS FIXTURE REFER DETAIL THIS SHEET
- POLE MOUNTED SITE LIGHTING, IV SINGLE 16" CUT OFF, FORWARD THROWN 250M HPS FIXTURE REFER DETAIL THIS SHEET
- F. H. PRIVATE FIRE HYDRANT (U.N.O.)
- BIKE PARKING

architecture
interiors
planning
engineering

Dekker
Perich
Sabatini

6801 Jefferson NE
Suite 100
Albuquerque, NM 87109
505 761-9700
fax 505 761-4222
dps@dpsbq.com

ARCHITECT



ENGINEER

Administrative
Amendment

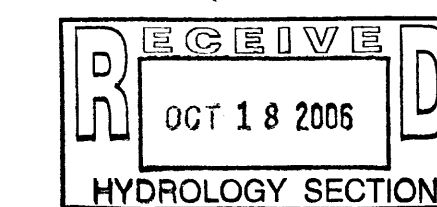
PROJECT

Building 1 - Phase 4 Addition
10420 Research Park Road SE
Albuquerque, New Mexico 87123

REVISIONS
5/1/06 TRANSPORTATION COMMENTS

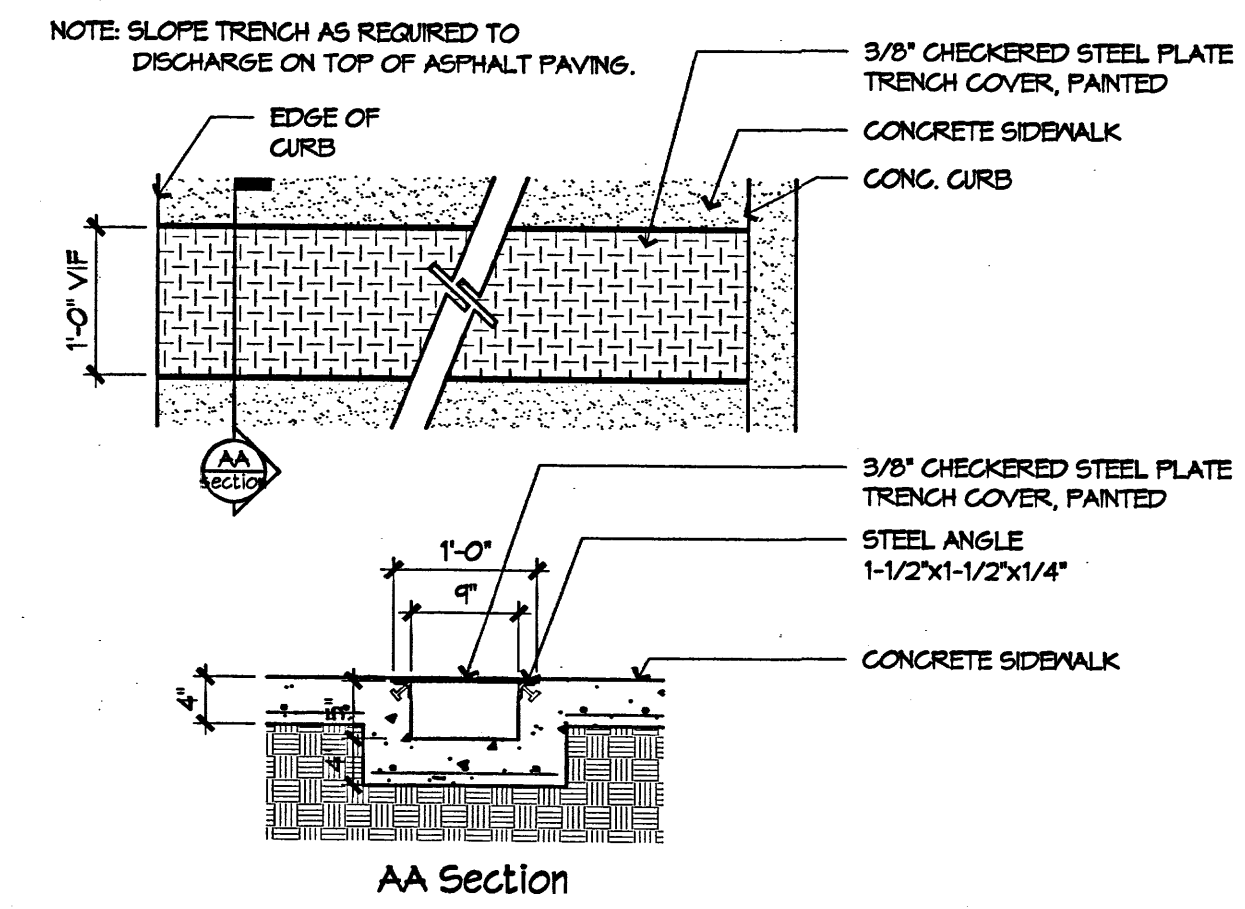
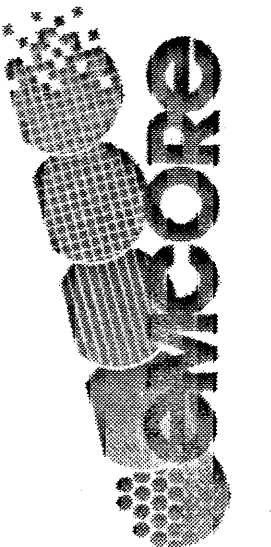
DRAWN BY amd
REVIEWED BY
DATE March 14, 2006
PROJECT NO. 03151
DRAWING NAME

SITE PLAN

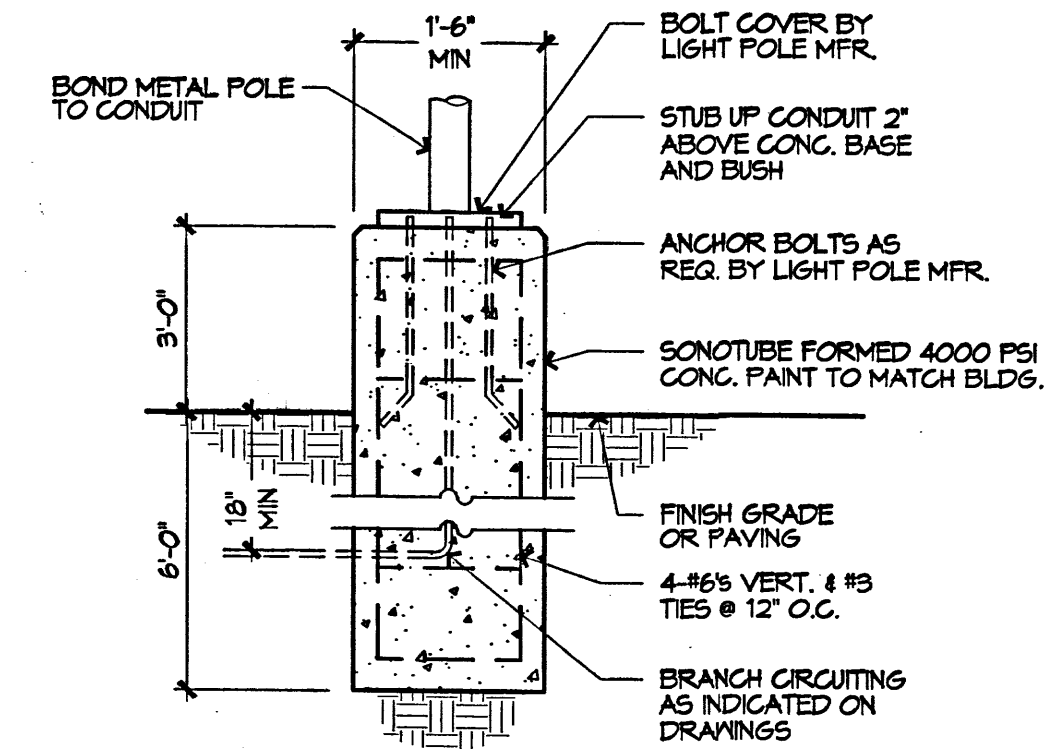


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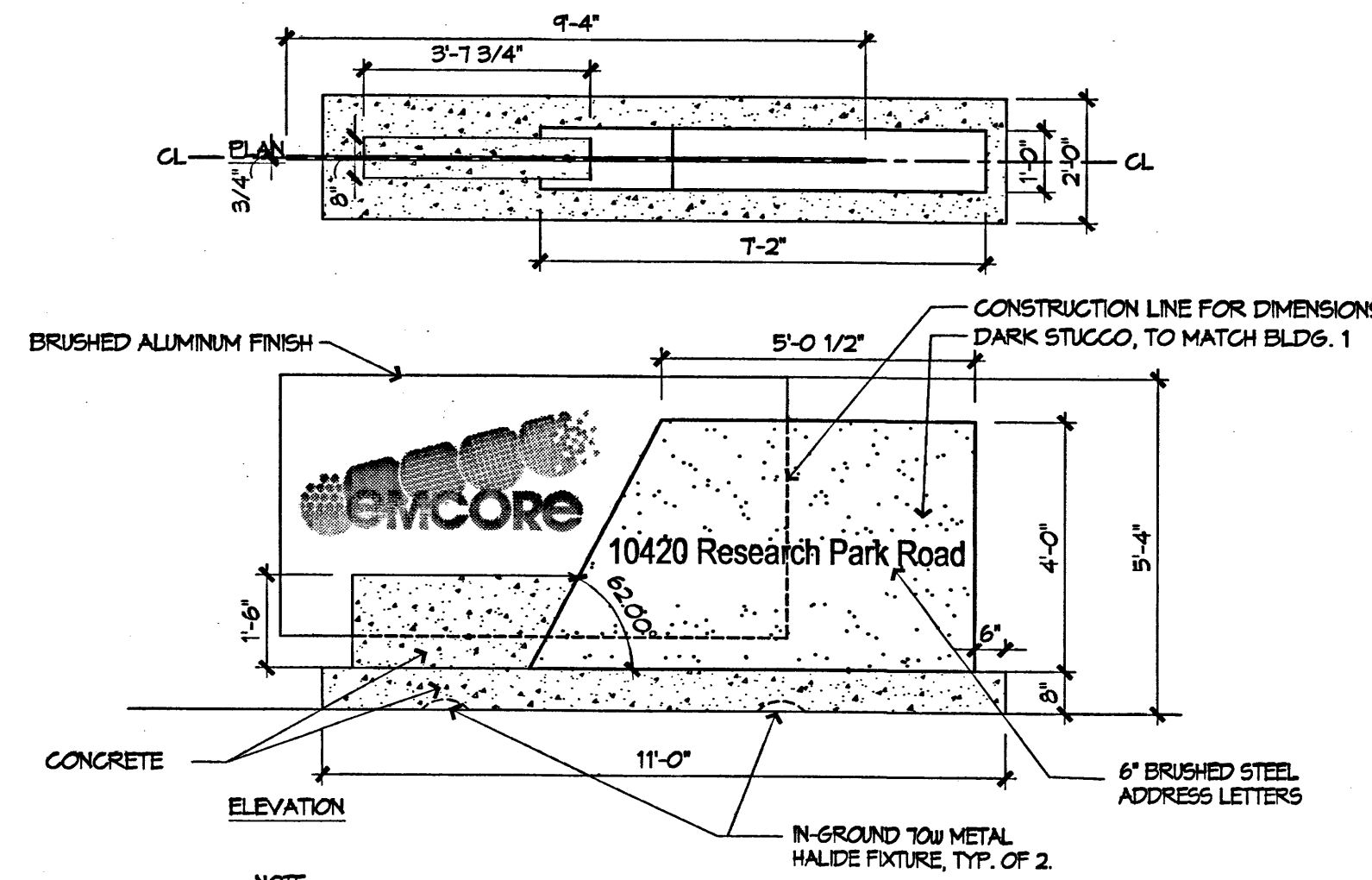
A001
OF



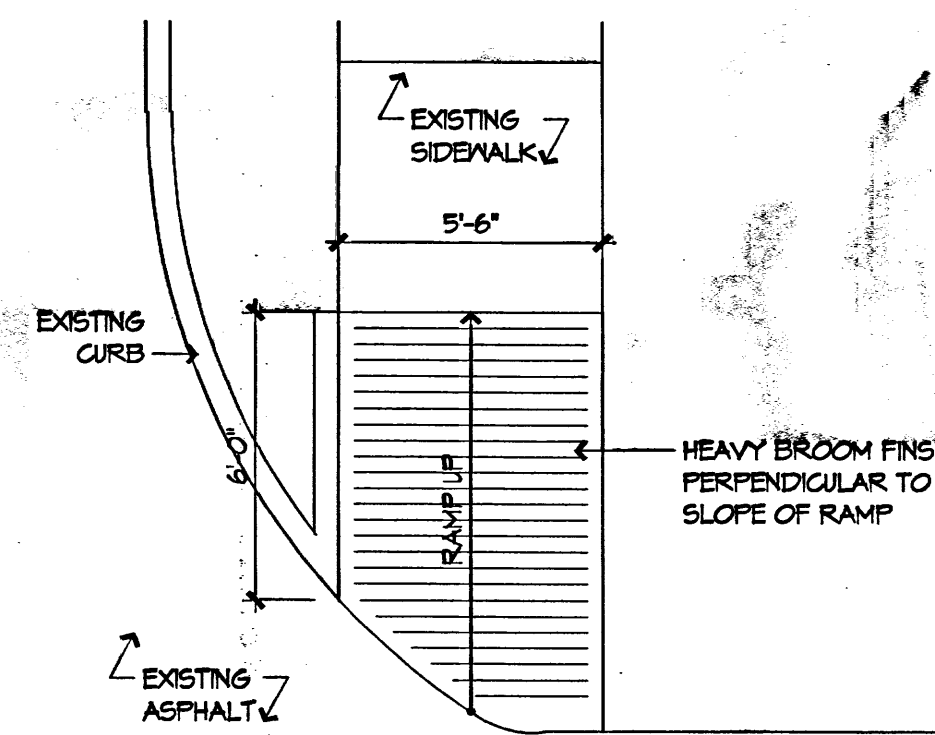
B5 TRENCH DRAIN COVER
DETAIL 3/4" = 1'-0"



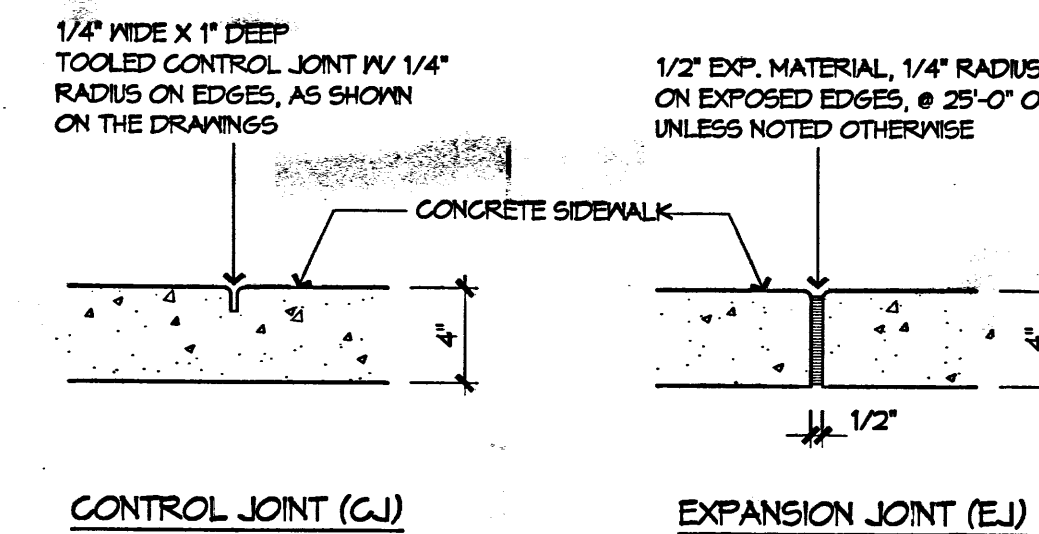
C5 LIGHT POLE BASE
DETAIL 1/2" = 1'-0"



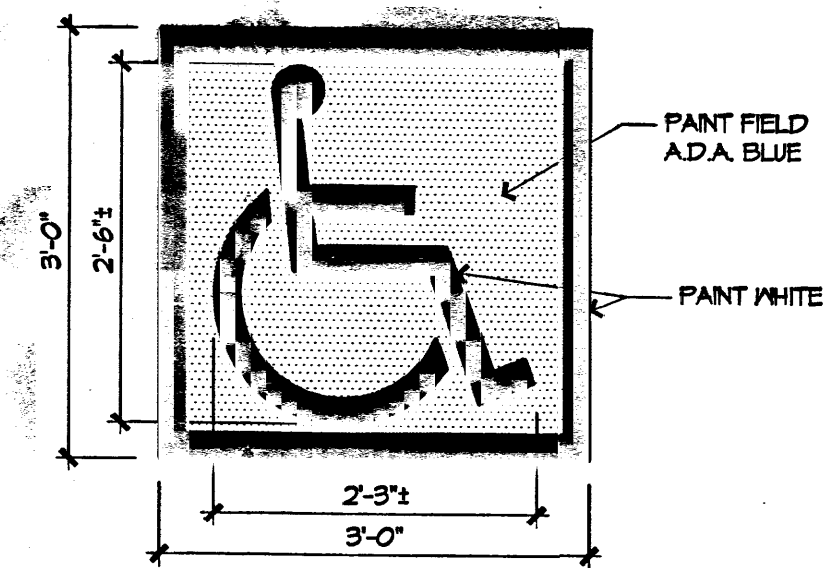
**C4 MONUMENT SIGNAGE
ALONG EUBANK AND RESEARCH PARK**
3/8" = 1'-0"



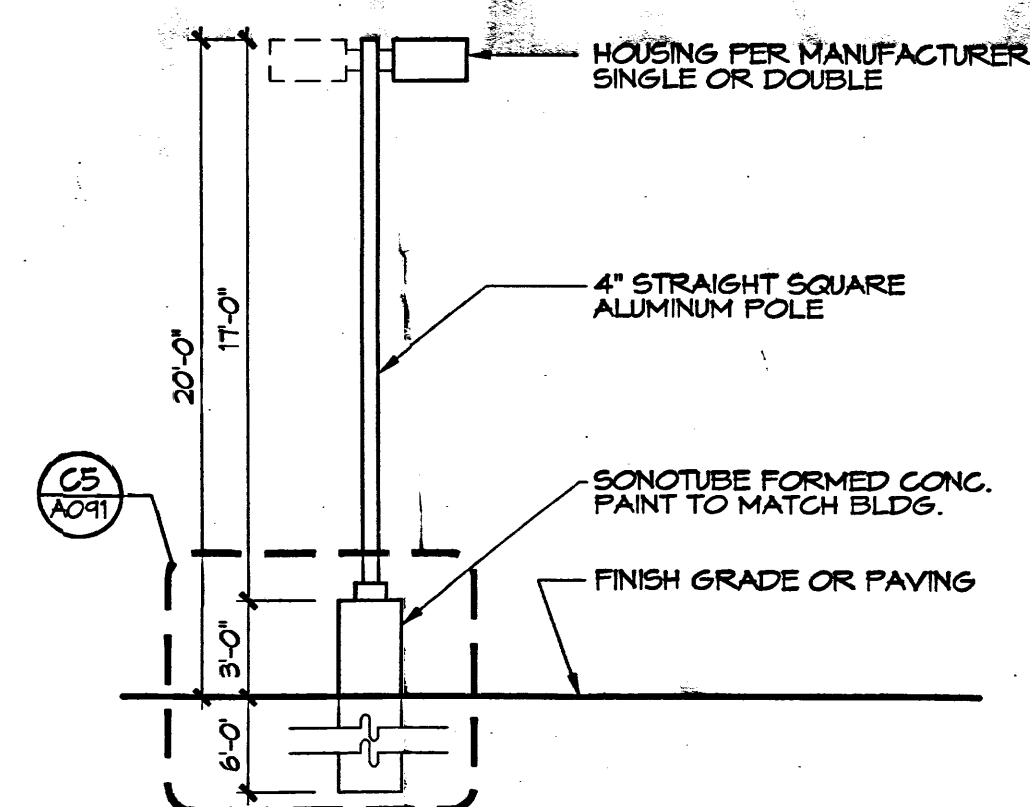
D3 SIDEWALK RAMP DETAIL
DETAIL 1/4" = 1'-0"



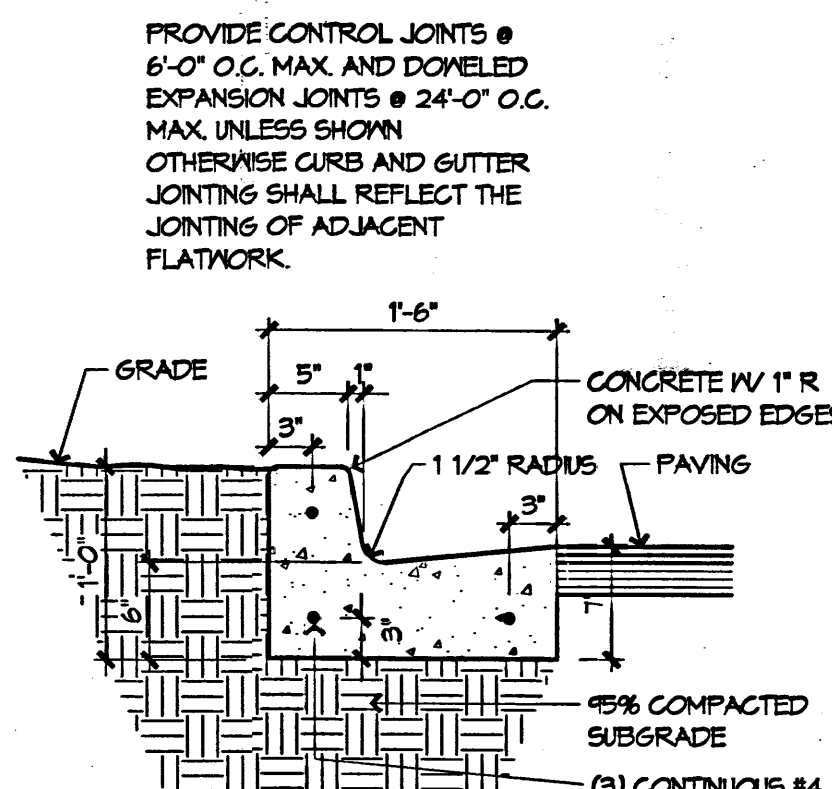
D4 CONCRETE JOINT
DETAILS 1 1/2" = 1'-0"



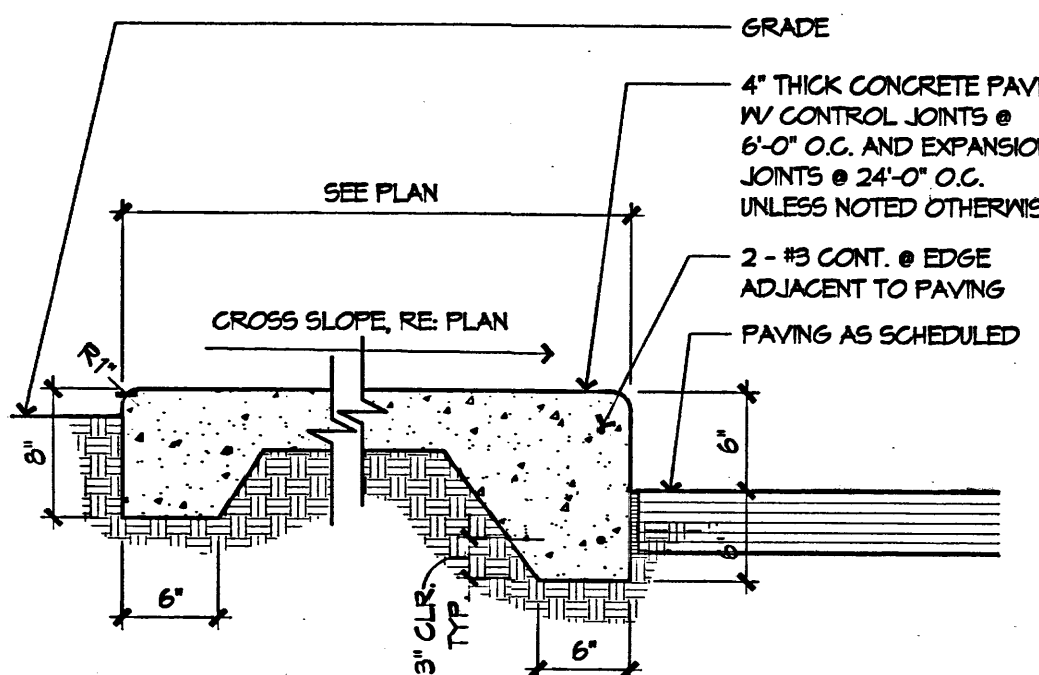
D5 A.D.A. PAVEMENT SIGNAGE
DETAIL 3/4" = 1'-0"



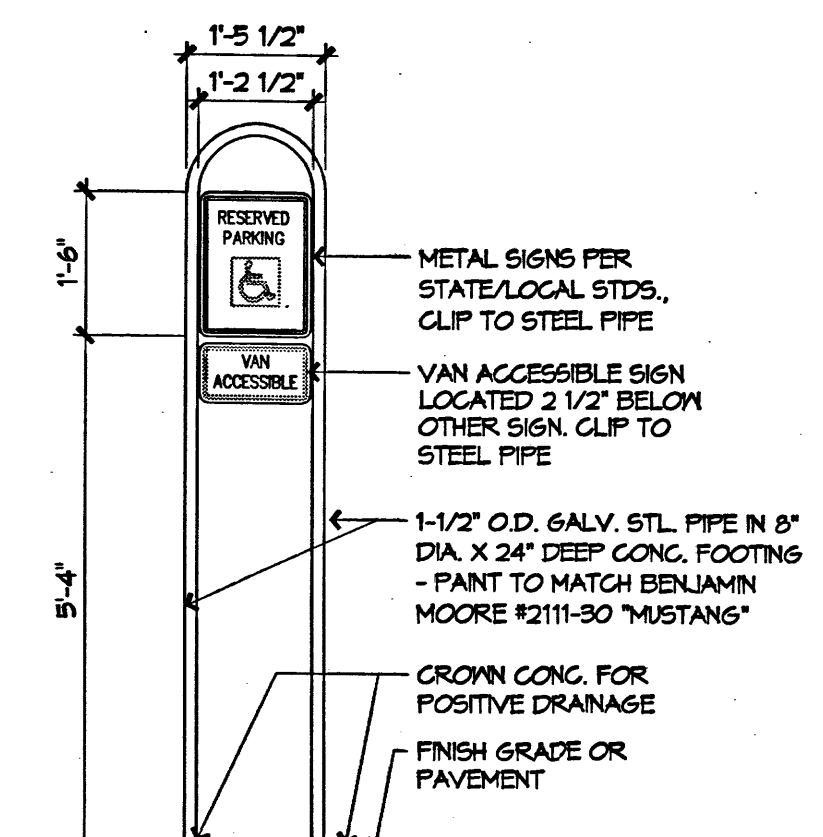
E2 LIGHT POLE
DETAIL 1/8" = 1'-0"



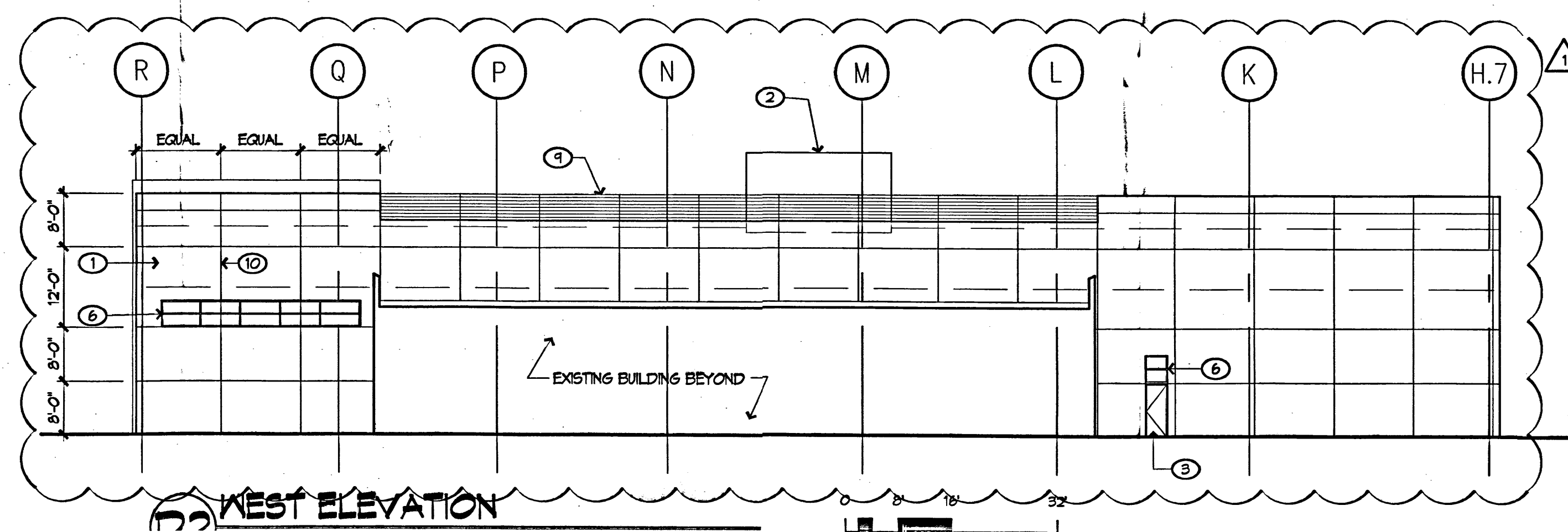
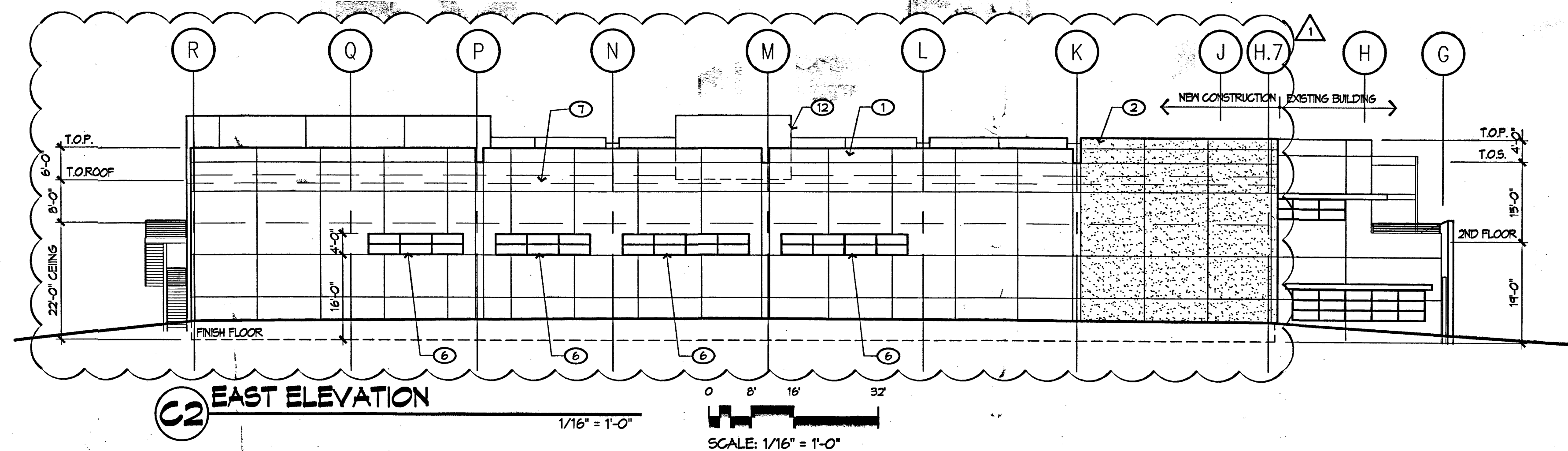
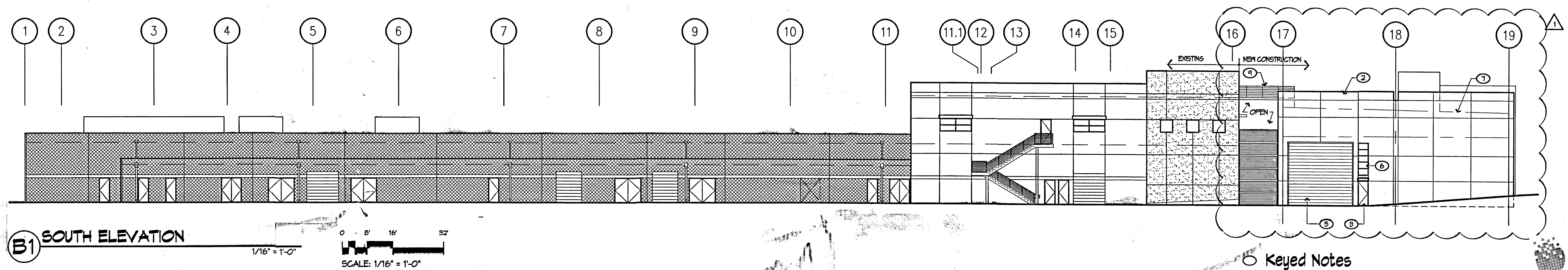
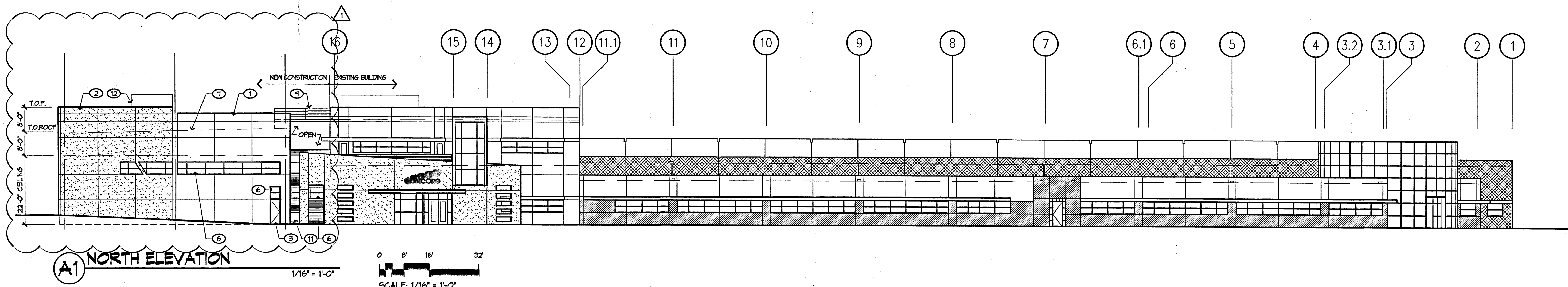
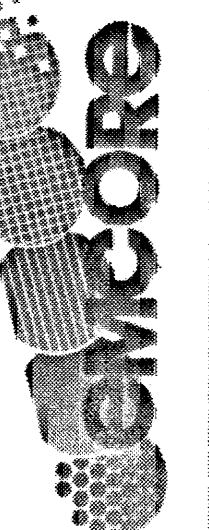
E3 CONCRETE CURB & GUTTER
curbo1 1" = 1'-0"



E4 SIDEWALK
DETAIL 1" = 1'-0"



E5 POLE MOUNTED H.C. SIGNAGE
DETAIL 1/2" = 1'-0"



Keyed Notes

1. STUCCO COLOR #2 - BEIGE - MATCH EXISTING
2. STUCCO COLOR #3 - CINNAMON - MATCH EXISTING
3. PAINTED H.M. DOOR & FRAME, COLOR #2 - BEIGE MATCHING EXISTING.
4. PAINTED H.M. DOOR & FRAME, COLOR #3 - CINNAMON - MATCHING EXISTING.
5. PAINTED COILING OVER HEAD DOOR & FRAME, COLOR #2 - BEIGE MATCHING EXISTING.
6. REFLECTIVE 1" INSULATING GLASS IN LEAR ANODIZED ALUMINUM FRAMES.
7. LINE OF ROOF BEYOND.
8. STUCCO CONTROL JOINT, TYP.
9. STEEL GUARDRAIL, PAINTED TURQUOISE TO MATCH EXIST. METAL WORK.
10. STUCCO REVEAL, TYP.
11. CORRUGATED METAL SIDING PAINTED TURQUOISE TO MATCH EXISTING METAL WORK.
12. MECHANICAL UNIT.

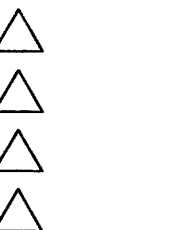
**Request For
Administrative Amendment #6**

Approved By DRB Case Number 98-54
Admin. Amend. #1 AA-98-66 dated 5/14/98 approved 5/21/98
Admin. Amend. #2 AA-98-132 dated 9/10/98 approved 9/24/98
Admin. Amend. #3 AA-001340000000235 dated 6/16/00 approved 6/21/00
Project #1000613
Admin. Amend. #4 AA-00236-00000-01100 dated 11/20/00 approved 12/15/00
Project #1000613
Admin. Amend. #5 AA-04AA-01401 dated 09/01/04 approved 10/13/04
Project #1000613
REQUESTED REVISIONS TO SITE PLAN:
ADD 11,00 SF BUILDING ADDITION AND ASSOCIATED PARKING LOT.

Hatch Legend

- EXISTING CONC. PANEL #1
- EXISTING CONC. PANEL #2
- STUCCO, COLOR #1
- STUCCO, COLOR #2 - BEIGE
- STUCCO, COLOR #3 - CINNAMON

REVISIONS



DRAWN BY

REVIEWED BY

DATE

PROJECT NO.

DRAWING NAME

ELEVATIONS

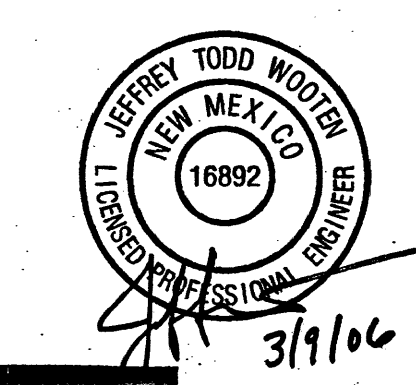
SHEET NO.

**Dekker
Perich
Sabatini**

6801 Jefferson NE
Suite 100
Albuquerque, NM 87109
505 761-9700
fax 761-4222
dps@dpsobq.com

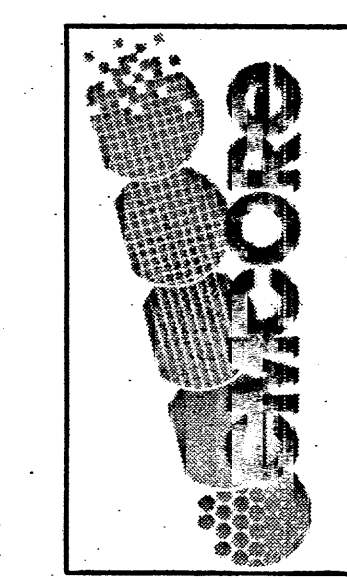
ARCHITECT

ENGINEER

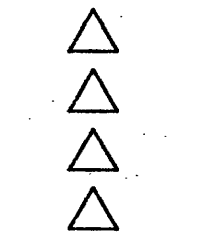


PROJECT

Phase 4 - Building 1 Addition
10420 Research Road SE
Albuquerque, New Mexico 87123



REVISIONS



DRAWN BY **BO**
REVIEWED BY **JTW**
DATE **MARCH 9, 2006**

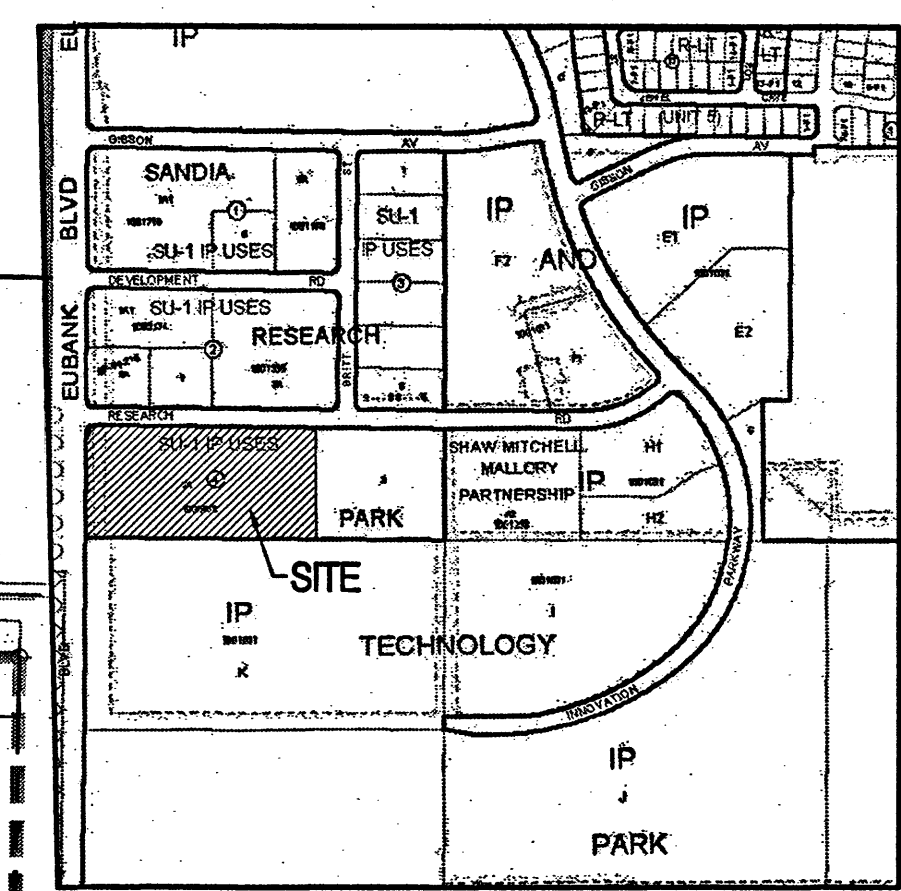
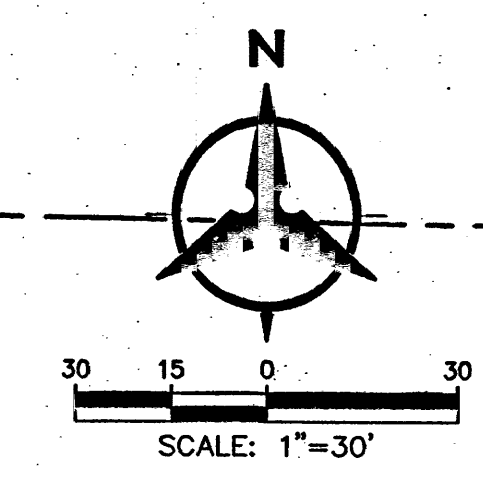
PROJECT NO.
DRAWING NAME

**GRADING &
DRAINAGE PLAN**

SHEET NO.

C100
OF

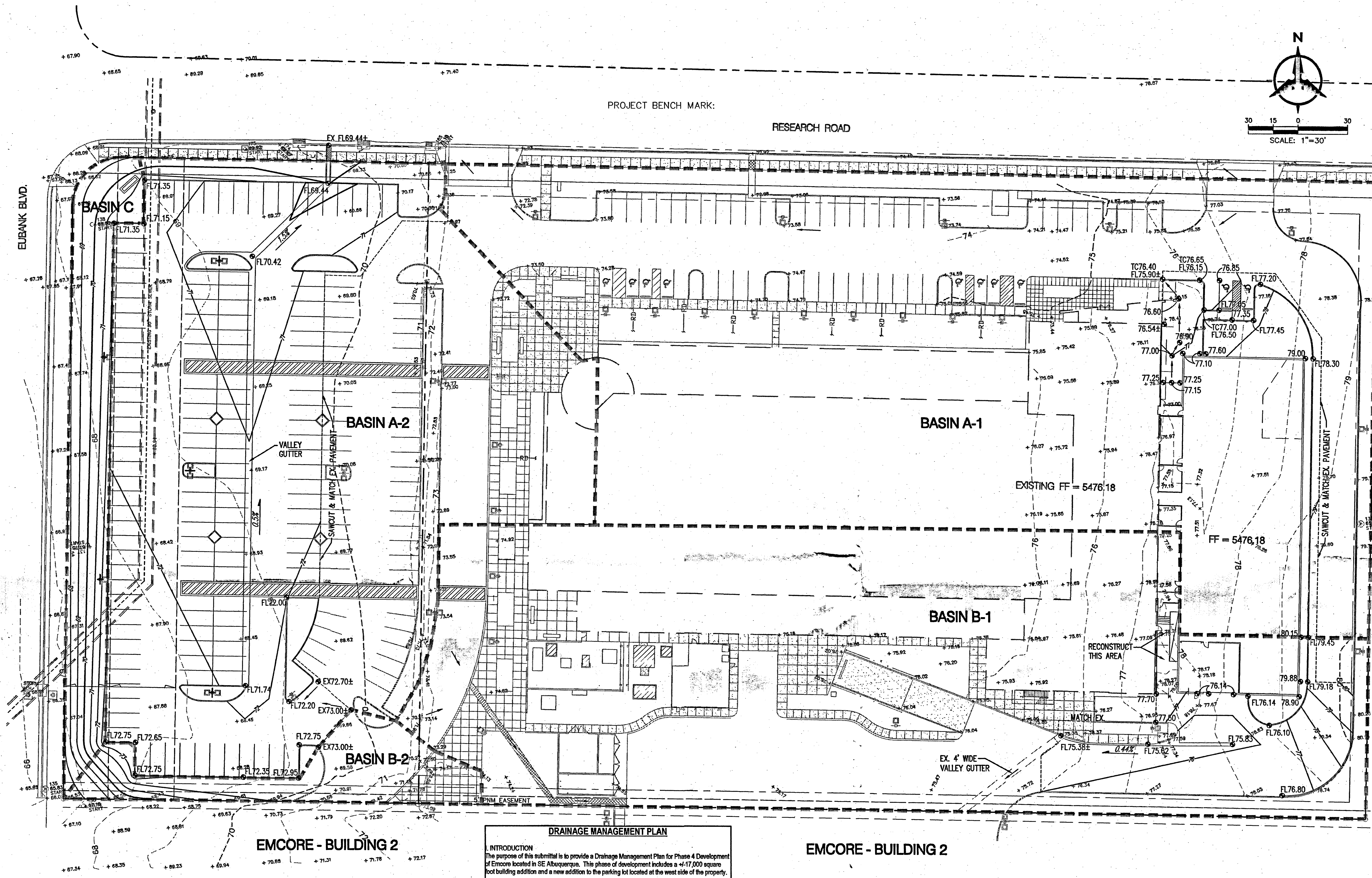
Bohannon & Huston
Courtyard 1 7500 Jefferson NE Albuquerque, NM 87109-4335
ENGINEERING • SPATIAL DATA • ADVANCED TECHNOLOGIES



VICINITY MAP
COA ZONE ATLAS PAGE M-21-Z

LEGEND

- PROPERTY LINE
- - - - - EXISTING CONTOUR
- - - - - PROPOSED INDEX CONTOUR
- - - - - PROPOSED INTERMEDIATE CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- FL = FLOWLINE
- TS = TOP OF SIDEWALK
- FWL = FINISHED GROUND HIGH SIDE
- FWL = FINISHED GROUND LOW SIDE
- TW = TOP OF WALL
- DIRECTION OF FLOW



DRAINAGE MANAGEMENT PLAN

I. INTRODUCTION
The purpose of this submittal is to provide a Drainage Management Plan for Phase 4 Development of Emcore located in SE Albuquerque. This phase of development includes a +/-17,000 square foot building addition and a new addition to the parking lot located at the west side of the property.

II. SITE LOCATION
The site is currently legally described as Lot 2A, Block 4 of Sandia Research Park (+/- 7.0 acres). The site is located within zone atlas map #M-21, and is in hydrologic zone 3. The site is located at the southeast corner of Eubank and Research Rd.

III. EXISTING HYDROLOGIC CONDITIONS
Currently the site (7.0 ac.) is developed as Emcore (through Phase 3). The surrounding streets and infrastructure are in place. Drainage from the site is currently split. The north portion of the site drains to Research Road and ultimately into the Eubank storm drain system (50" RCP). The south portion of the site drains to Emcore, Building 2 located south of the subject site. Per the approved Manzano Mesa Master Drainage Study by Smith Engineering Company (August 1996), this fully developed site is allowed to drain into the 90" SD along Eubank via the curb inlets located in Research. However, current drainage patterns for the site show that the southern portion of the site outfalls to the Emcore - Building 2 site to the south, which has a detention pond capable of handling the flow. This "diversion" potentially reduces the impact that the subject site has to the Eubank system.

IV. PROPOSED HYDROLOGIC CONDITIONS
The proposed conditions for the project are shown on this Grading Plan. The hydrologic analysis for this area is based on drainage requirements for the 100-yr, 6-hr storm event. The total site (+/- 7.0 acres) will generate a total of 34.18 cfs under newly developed conditions and consists of approximately 90% D land treatment. Basins A-1 and A-2 (22.34 cfs) will drain to Research Road and enter the Eubank Storm drain system through existing curb inlets in Research. Basins B-1 and B-2 (10.77 cfs) will continue to drain to the south onto the Emcore - Building 2 site and ultimately into the detention pond located at the south end of that site. Basin C (1.06 cfs) will sheet flow into Eubank and into the existing curb inlet located near the south end of the subject site along Eubank.

V. CONCLUSION
This drainage management plan provides for grading and drainage elements which are capable of safely passing the 100 year storm and which meet city requirements and are in conformance with the previously approved Manzano Mesa Master Drainage Study. With this submittal we are requesting rough grading, foundation, and paving permit approval.

EMCORE - BUILDING 2

| EMCORE - PHASE 4 EXPANSION Proposed Conditions Basin Data Table | | | | | | | | | | |
|--|----------------|-------------|----------------------------|------|-------|------------------|--------------|---------------|-----------------|-----------------|
| This table is based on the DPM Section 22.2, Zone 3 | | | | | | | | | | |
| BASIN ID | Area (SQ. FT.) | Area (AC.) | Land Treatment Percentages | | | Q(100) (cfs/ac.) | Q(100) (cfs) | WT E (Inches) | V(100)hrs (CF) | V(100)mins (CF) |
| | | | A | B | C | | | | | |
| A-1 | 116108 | 2.67 | 0.0% | 0.0% | 10.0% | 4.86 | 12.96 | 2.25 | 21799 | 41828 |
| A-2 | 84053 | 1.93 | 0.0% | 0.0% | 10.0% | 4.86 | 9.38 | 2.25 | 15781 | 30280 |
| B-1 | 89859 | 2.06 | 0.0% | 0.0% | 10.0% | 4.86 | 10.03 | 2.25 | 16871 | 32372 |
| B-2 | 6718 | 0.15 | 0.0% | 0.0% | 15.0% | 4.78 | 0.74 | 2.20 | 1231 | 2326 |
| C | 9840 | 0.23 | 0.0% | 0.0% | 20.0% | 4.71 | 1.06 | 2.15 | 1760 | 3269 |
| TOTAL | 306578 | 7.04 | - | - | - | 4.86 | 34.18 | - | 57442.33 | 110074 |

GRADING NOTES

- EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.
- THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCURRED TO THE PROJECT COST.
- ALL WORK RELATIVE TO FOUNDATION CONSTRUCTION, SITE PREPARATION, AND PAVEMENT INSTALLATION, AS SHOWN ON THIS PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "GEOTECHNICAL INVESTIGATION," AS PROVIDED BY THE ARCHITECT OR OWNER. ALL OTHER WORK SHALL, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT, (FIRST PRIORITY) SPECIFICATIONS, AND/OR THE CITY OF ALBUQUERQUE (COA) STANDARD SPECIFICATIONS FOR PUBLIC WORKS (SECOND PRIORITY).
- EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.
- IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE OF THE PROPERTY BOUNDARIES EXCEPT AS REQUIRED BY THIS PLAN.
- THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY. THIS SHOULD BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS OR SILT FENCE AT THE PROPERTY LINES AND NETTING THE SOIL TO PROTECT IT FROM WIND EROSION.
- A DISPOSAL SITE FOR ANY & ALL EXCESS EXCAVATION MATERIAL, AND UNSUITABLE MATERIAL AND/OR A BORROW SITE CONTAINING ACCEPTABLE FILL MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS AND APPROVED BY THE OBSERVER. ALL COSTS INCURRED IN OBTAINING A DISPOSAL OR BORROW SITE AND HAUL TO OR FROM SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.
- PAVING AND ROADWAY GRADES SHALL BE +/- 0.1' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATION.
- ALL PROPOSED CONTOURS REFLECT TOP OF PAVEMENT ELEVATIONS IN THE PARKING AREA AND MUST BE ADJUSTED FOR MEDIANS AND ISLANDS.
- VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION PRIOR TO BEGINNING CONSTRUCTION.



Phase 4 - Building 1 Addition
10420 Research Road SE
Albuquerque, New Mexico 87123

UTILITY NOTES

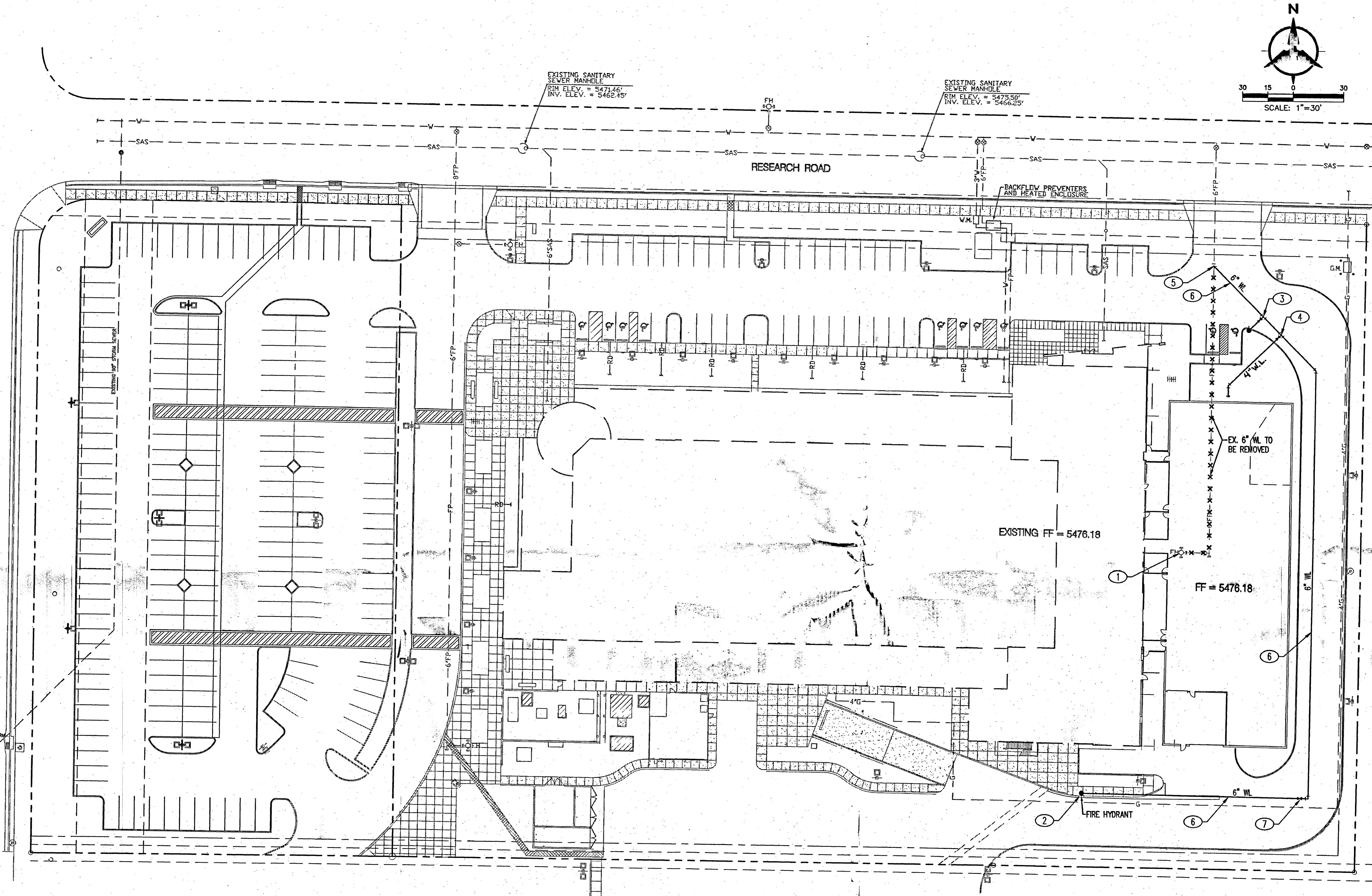
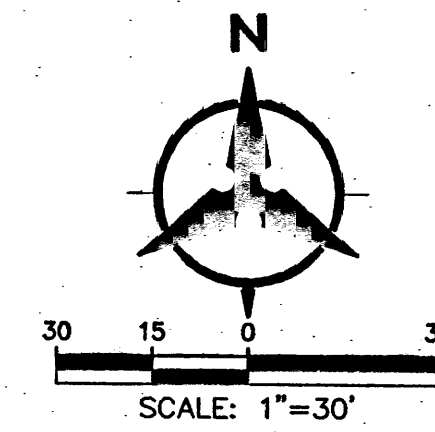
1. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE INSTALLATION OF ALL WORK RELATED TO MECHANICAL UTILITIES AS SHOWN ON THIS PLAN INCLUDING: TRENCHING, BACKFILL, SUPPORTS, CLEANOUT PADS, SERVICE STOPS AND BOXES, SERVICE LINES, TESTING, CLEANING, AND STERILIZING. ANY WORK NOT ACCEPTED BY THE ARCHITECT OR ENGINEER DUE TO IMPROPER WORKMANSHIP OR LACK OF PROPER COORDINATION SHALL BE REMOVED AND CORRECTLY INSTALLED AT THE CONTRACTOR'S EXPENSE, AS DIRECTED.
2. MINIMUM DEPTHS OF COVER SHALL BE: 36" FOR WATERLINES AND 48" FOR SEWER, EXCEPT AT BUILDING CONNECTION.
3. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED OF HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE IAPMO UNIFORM PLUMBING CODE, LATEST EDITION.
4. UTILITY LINES SHALL BE INSTALLED PRIOR TO PAVEMENT, CURB AND GUTTER, AND/OR SIDEWALK, AS APPLICABLE.
5. ROUGH GRADING OF SITE (±0.5') SHALL BE COMPLETED PRIOR TO INSTALLATION OF UTILITY LINES.
6. CONTRACTOR WILL BE RESPONSIBLE FOR CONNECTIONS TO BUILDING DRAIN LINES AND ALL NECESSARY FITTINGS.
7. ALL VALVES SHALL BE ANCHORED PER COA STANDARD DWG. 2333.
8. FIRE LINES SHALL USE PIPE MATERIALS UNDERWRITERS LABORATORIES LISTED AND APPROVED FOR FIRE SERVICE.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WATER METER, FIRE LINE, AND SEWER HOOKUP FEES FOR INSTALLATIONS. OWNER SHALL BE RESPONSIBLE FOR UTILITY EXPANSION CHARGES, PRORATA AND OTHER SPECIAL ASSESSMENTS.
10. CONTRACTOR SHALL VERIFY INVERTS AND LOCATIONS OF EXISTING WATER/SAS LINES PRIOR TO BEGINNING WORK. ALL CONFLICTS SHALL BE BROUGHT TO ATTENTION OF THE ENGINEER AND RESOLVED PRIOR TO BEGINNING WORK.

UTILITY KEYED NOTES

1. EXISTING FIRE HYDRANT TO BE RELOCATED.
2. INSTALL RELOCATED FIRE HYDRANT (PRIVATE) PER COA STD DWG 2340, WITH 4' BURY AND FULLY RESTRAINED.
3. INSTALL 6"x6" TEE, 6" GATE VALVE, AND FIRE HYDRANT (PRIVATE) PER COA STD DWGS. FH PER COA STD DWG 2340, WITH 4 FT BURY AND FULLY RESTRAINED.
4. INSTALL 6"x4" TEE, 4" VALVE, AND 4" PRIVATE FIRE LINE SERVICE FOR BUILDING SPRINKLERS. BACKFLOW PREVENTER TO BE INSTALLED INSIDE MECHANICAL ROOM. FDC TO BE LOCATED ON BUILDING WALL. REMOVE AND REPLACE EXISTING ASPHALT PAVEMENT AS REQUIRED FOR INSTALLATION. NEW PAVEMENT TO MEET OR EXCEED EXISTING.
5. CONNECTION TO EXISTING PRIVATE 6" FIRE LINE STUB.
6. INSTALL 6" PRIVATE FIRE LINE. REMOVE AND REPLACE EXISTING ASPHALT PAVEMENT AS REQUIRED FOR INSTALLATION. NEW PAVEMENT TO MEET OR EXCEED EXISTING.
7. INSTALL NEW 6" GATE VALVE.

Bohannon & Huston

Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING • SPATIAL DATA • ADVANCED TECHNOLOGIES

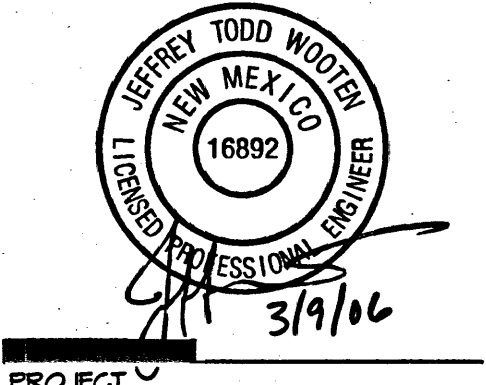


**Dekker
Perich
Sabatini**

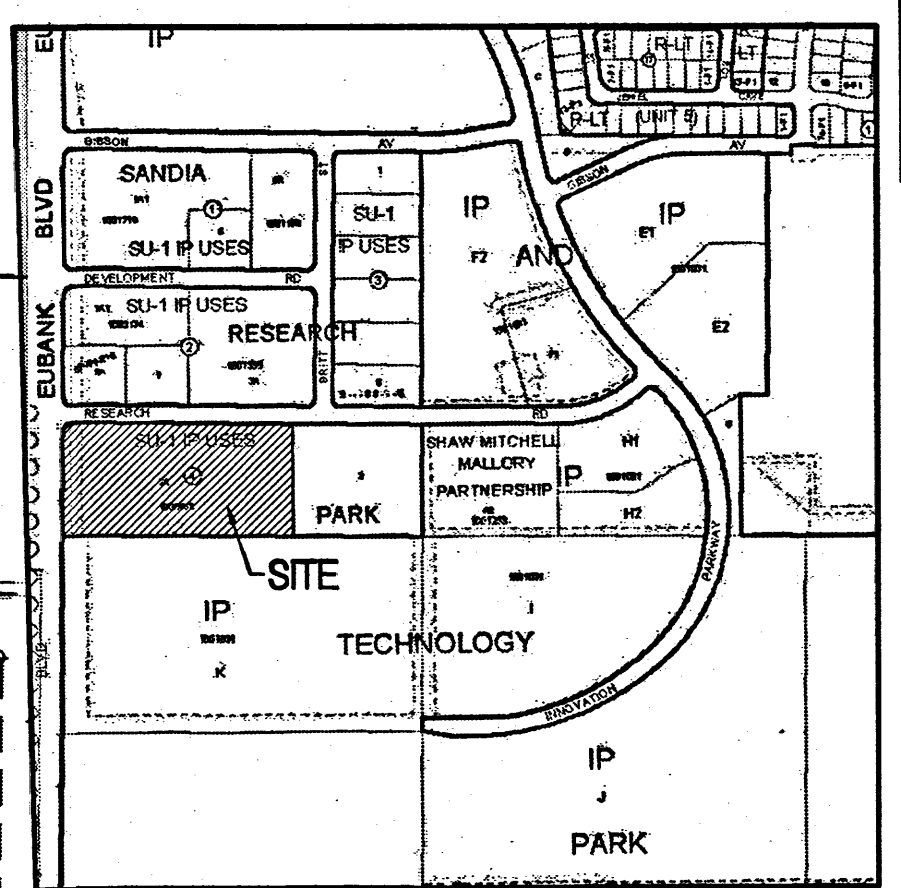
6801 Jefferson NE
Suite 100
Albuquerque, NM 87109
505 761-9700
fax 761-4222
dps@dpsabq.com

ARCHITECT

ENGINEER



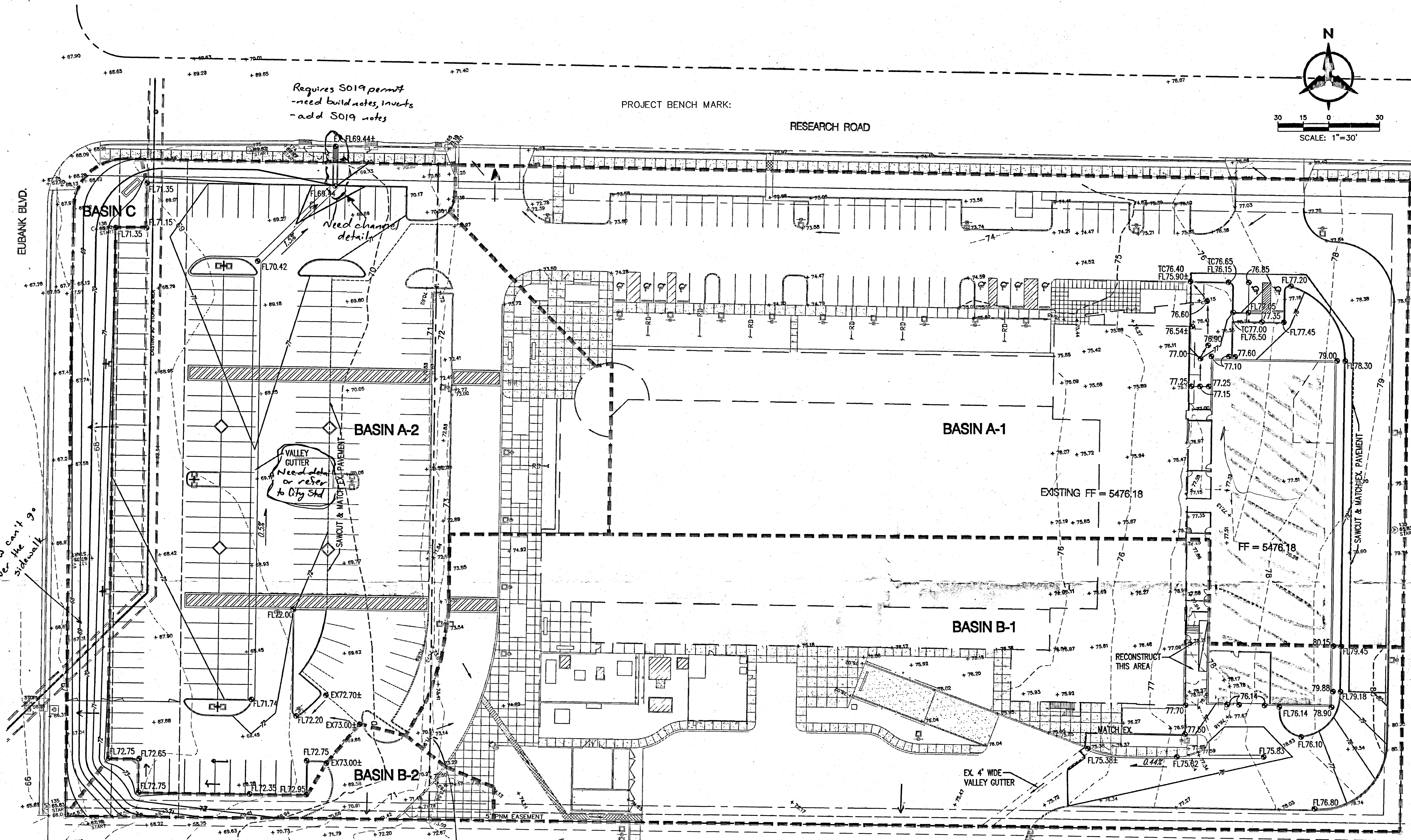
Phase 4 - Building 1 Addition
10420 Research Road SE
Albuquerque, New Mexico 87123



VICINITY MAP
COA ZONE ATLAS PAGE M-21-Z

LEGEND

- PROPERTY LINE
- - - - - 5040 - - - - - EXISTING CONTOUR
- - - - - 35 - - - - - PROPOSED INDEX CONTOUR
- - - - - 32 - - - - - PROPOSED INTERMEDIATE CONTOUR
- 32.40 EXISTING SPOT ELEVATION
- 32.40 PROPOSED SPOT ELEVATION
- FL = FINISH LINE
- FS = TOP OF SIDEWALK
- FGL = FINISHED GROUND LOW SIDE
- TW = TOP OF WALL
- DIRECTION OF FLOW



GRADING NOTES

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- PAVING AND ROADWAY GRADES SHALL BE +/- 0.1' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATION.
- ALL PROPOSED CONTOURS REFLECT TOP OF PAVEMENT ELEVATIONS IN THE PARKING AREA AND MUST BE ADJUSTED FOR MEDIAN AND ISLANDS.
- VERIFY ALL ELEVATIONS SHOWN ON PLAN BASIS OF ELEVATION CONTROL STATION PRIOR TO BEGINNING CONSTRUCTION.

DRAINAGE MANAGEMENT PLAN

INTRODUCTION
The purpose of this submittal is to provide a Drainage Management Plan for Phase 4 Development of Emcore located in SE Albuquerque. This phase of development includes a 417,000 square foot building addition and a new addition to the parking lot located at the west side of the property.

II. SITE LOCATION
The site is currently legally described as Lot 2A, Block 4 of Sandia Research Park (47.70 acres). The site is located within zone atlas map #M-21, and is in hydrologic zone 3. The site is located at the southeast corner of Eubank and Research Rd.

III. EXISTING HYDROLOGIC CONDITIONS
Currently the site (7.0 ac.) is developed as Emcore (through Phase 3). The surrounding streets and infrastructure are in place. Drainage from the site is currently split. The north portion of the site drains to Research Road and ultimately into the Eubank storm drain system (80' RCP). The south portion of the site drains to Emcore, Building 2 located south of the subject site. For the approved Manzano Mesa Master Drainage Study by Smith Engineering Company (August 1998), this fully developed site is allowed to drain into the 90" SD along Eubank via the curb inlet located in Research. However, current drainage patterns for the site show that the southern portion of the site outfalls to the Emcore - Building 2 site to the south, which has a detention pond capable of handling the flow. This diversion potentially reduces the impact that the subject site has to the Eubank system.

IV. PROPOSED HYDROLOGIC CONDITIONS
The proposed conditions for the project are shown on this Grading Plan. The hydrologic analysis for this area is based on drainage requirements for the 100-yr, 6-hr storm event. The total site (47.70 acres) will generate a total of 34.18 cfs under newly developed conditions and consists of approximately 90% D land treatment. Basins A-1 and A-2 (22.34 cfs) will drain to Research Road and enter the Eubank Storm drain system through existing curb inlets in Research. Basins B-1 and B-2 (10.77 cfs) will continue to drain to the south onto the Emcore - Building 2 site and ultimately into the detention pond located at the south end of that site. Basin C (1.06 cfs) will shed flow into Eubank and into the existing curb inlet located near the south end of the subject site along Eubank.

V. CONCLUSION
This drainage management plan provides for grading and drainage elements which are capable of safely passing the 100 year storm and which meet city requirements and are in conformance with the previously approved Manzano Mesa Master Drainage Study. With this submittal we are requesting rough grading, foundation, and paving permit approval.

EMCORE - BUILDING 2

Must show where southern portion of site outfalls - how do you know the is detention pond is capable of handling this additional flow?

EMCORE - PHASE 4 EXPANSION
Proposed Conditions Basin Data Table

| This table is based on the DPM Section 22.2, Zone 3 | | | | | | | | | | |
|---|----------------|------------|----------------------------|------|-------|-------|-------------------|--------------|---------------|-----------------------------|
| BASIN ID | Area (SQ. FT.) | Area (AC.) | Land Treatment Percentages | | | | Q(100) (cfs/acre) | Q(100) (cfs) | WT E (Inches) | V(100) ¹⁴⁴⁰ (CF) |
| PROPOSED CONDITIONS | | | | | | | | | | |
| A-1 | 118105 | 2.67 | 0.0% | 0.0% | 10.0% | 90.0% | 4.86 | 12.96 | 2.25 | 21799 |
| A-2 | 84053 | 1.93 | 0.0% | 0.0% | 10.0% | 90.0% | 4.88 | 9.38 | 2.25 | 15781 |
| B-1 | 98859 | 2.08 | 0.0% | 0.0% | 10.0% | 90.0% | 4.86 | 10.03 | 2.25 | 16871 |
| B-2 | 67118 | 0.15 | 0.0% | 0.0% | 15.0% | 85.0% | 4.78 | 0.74 | 2.20 | 1231 |
| C | 9840 | 0.23 | 0.0% | 0.0% | 20.0% | 80.0% | 4.71 | 1.08 | 2.15 | 1760 |
| TOTAL | 306578 | 7.04 | - | - | - | - | 4.86 | 34.18 | | 57442.33 |
| | | | | | | | | | | 110074 |

*Where are the existing flow calculations?
AQ = ?*

Bohannon & Huston
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