

GRADING & DRAINAGE PLAN

PURPOSE AND SCOPE

PURSUANT TO THE ESTABLISHED DRAINAGE ORDINANCE OF THE CITY OF ALBUQUERQUE AND THE DEVELOPMENT PROCESS MANUAL, THIS GRADING AND DRAINAGE PLAN OUTLINES THE DRAINAGE MANAGEMENT CRITERIA FOR CONTROLLING DEVELOPED RUNOFF FROM THE PROJECT SITE. THE PROJECT CONSISTS OF THE CONSTRUCTION OF A CANVAS VEHICLE MAINTENANCE FACILITY WITH RELATED SITE IMPROVEMENTS. THE IMPROVEMENTS CONSIST OF A 5,000 SF CANVAS WORK AREA WITHOUT A FOUNDATION. NO SITE IMPROVEMENTS ARE PROPOSED. THE FACILITY WILL BE ERECTED ON THE EXISTING ASPHALT SURFACE. THIS PLAN IS PREPARED TO SUPPORT A BUILDING PERMIT APPLICATION.

EXISTING CONDITIONS

THE PROJECT SITE CONTAINS APPROXIMATELY 3.46 ACRES AND IS LOCATED AT 2350 AZTEC ROAD NE. THE SITE IS PRESENTLY DEVELOPED, AN ASPHALT DRIVEWAY IS LOCATED IN THE NORTHERN PORTION OF THE SITE. THE SITE IS BOUNDED TO THE NORTH BY LOT 1A-2, GROWNEY II SUBDIVISION, TO THE EAST BY TRACT 2 AND TRACT 1B, GROWNEY II SUBDIVISION, TO THE SOUTH BY TRACT A, PRINCETON PARK OF COMMERCE AND TO THE WEST BY DEVELOPING PROPERTIES. CURRENTLY, ON-SITE RUNOFF DRAINS TO DRAINAGE SWALES, THAT ARE LOCATED IN TRACT 1A-2, WHERE IT IS CONVEYED TO AZTEC ROAD NE. NO OFFSITE FLOW IMPACTS THE SITE.

AS SHOWN BY THE FIRM PANEL FOR THIS AREA, THIS PROPERTY IS NOT LOCATED WITHIN A DESIGNATED FLOOD HAZARD ZONE.

PROPOSED CONDITIONS

AS SHOWN BY THE PLAN, THE PROPERTY IS TO BE DEVELOPED BY CONSTRUCTING A CANVAS VEHICLE MAINTENANCE STRUCTURE WITH RELATED SITE IMPROVEMENTS. NO SITE IMPROVEMENTS ARE PROPOSED SINCE THE CANVAS COVER WILL BE ERECTED ON THE EXISTING ASPHALT PAVEMENT. EXISTING DRAINAGE FLOWS WILL BE ALLOWED TO DRAIN THROUGH THE STRUCTURE. IT MAY BE PRUDENT TO INSTALL SILT FENCING ALONG THE EXISTING EDGE OF PAVEMENT TO CONTROL THE RELEASE OF SEDIMENT FROM THE UNPAVED PORTION OF THE PROPERTY.

ALL DRAINAGE FLOWS WILL BE DIRECTED TO EXISTING DRAINAGE SWALES THAT ARE LOCATED IN TRACT 1A-2, WHERE IT WILL BE CHANNLED TO AZTEC ROAD NE. THE PLAN SHOWS THE ELEVATIONS REQUIRED TO PROPERLY GRADE AND CONSTRUCT THE RECOMMENDED IMPROVEMENTS. FLOW ARROWS ARE GIVEN TO DEMONSTRATE THE DIRECTION OF DRAINAGE FLOWS, AND PROJECT HYDROLOGY IS GIVEN FOR BOTH EXISTING AND DEVELOPED CONDITIONS. SINCE THIS IS AN INFILL SITE, NO ON-SITE PONDING IS REQUIRED.

TEMPORARY EROSION CONTROL

TEMPORARY EROSION CONTROL MEASURES MAY BE IMPLEMENTED DURING CONSTRUCTION TO LIMIT THE DISCHARGE OF SEDIMENT FROM THE SITE TO ADJACENT PROPERTIES. SWPPP TO BE PROVIDED BY OTHERS.

CALCULATIONS

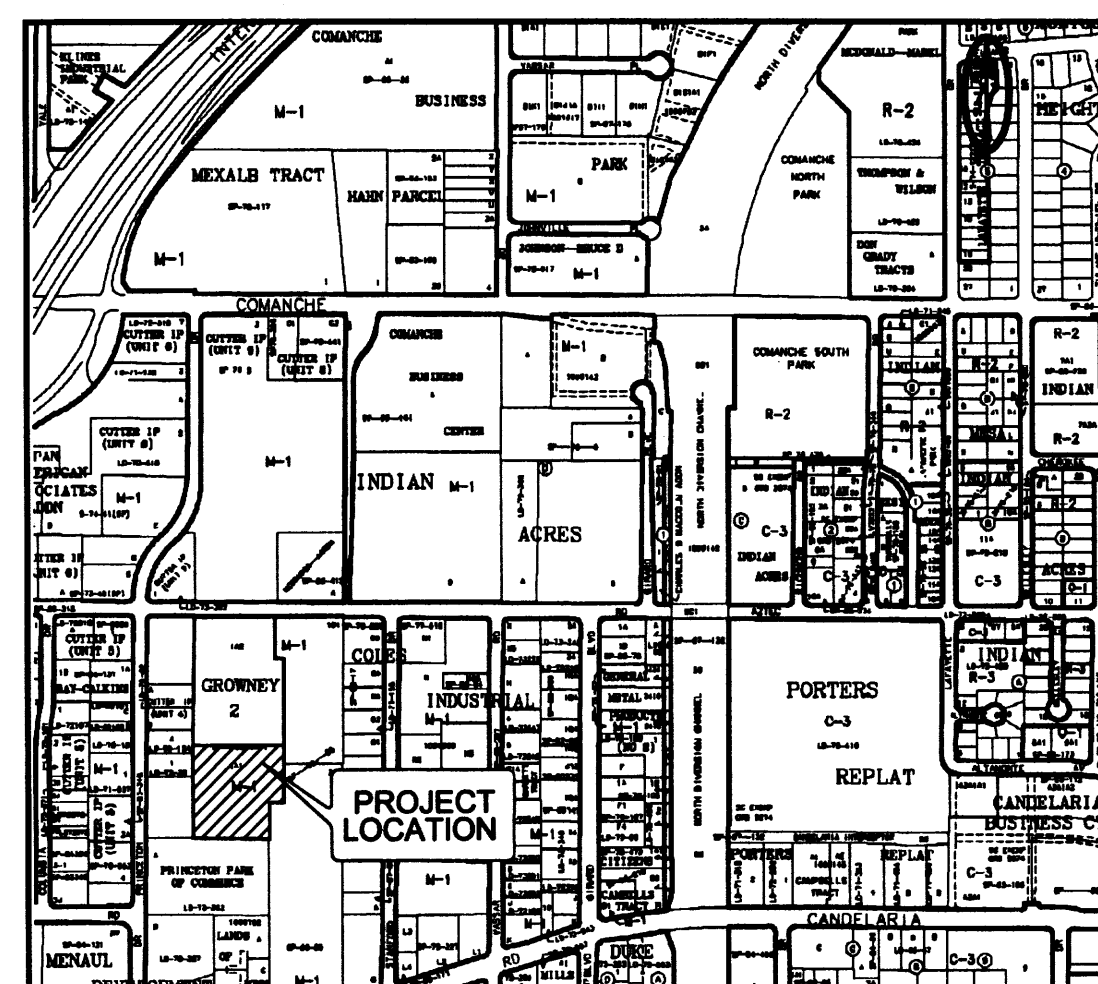
THE CALCULATIONS SHOWN HEREON DEFINE THE 100 YEAR/6 HOUR DESIGN STORM IMPACTING THE SITE AND CONTRIBUTING OFF-SITE DRAINAGE BASINS UNDER EXISTING AND DEVELOPED CONDITIONS. THE AHYMO METHOD OF ESTIMATING PEAK RUNOFF IS PRESENTED AS OUTLINED IN THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, SECTION 22.2, PART 'A', UPDATED JULY 1997.

KEYED NOTES

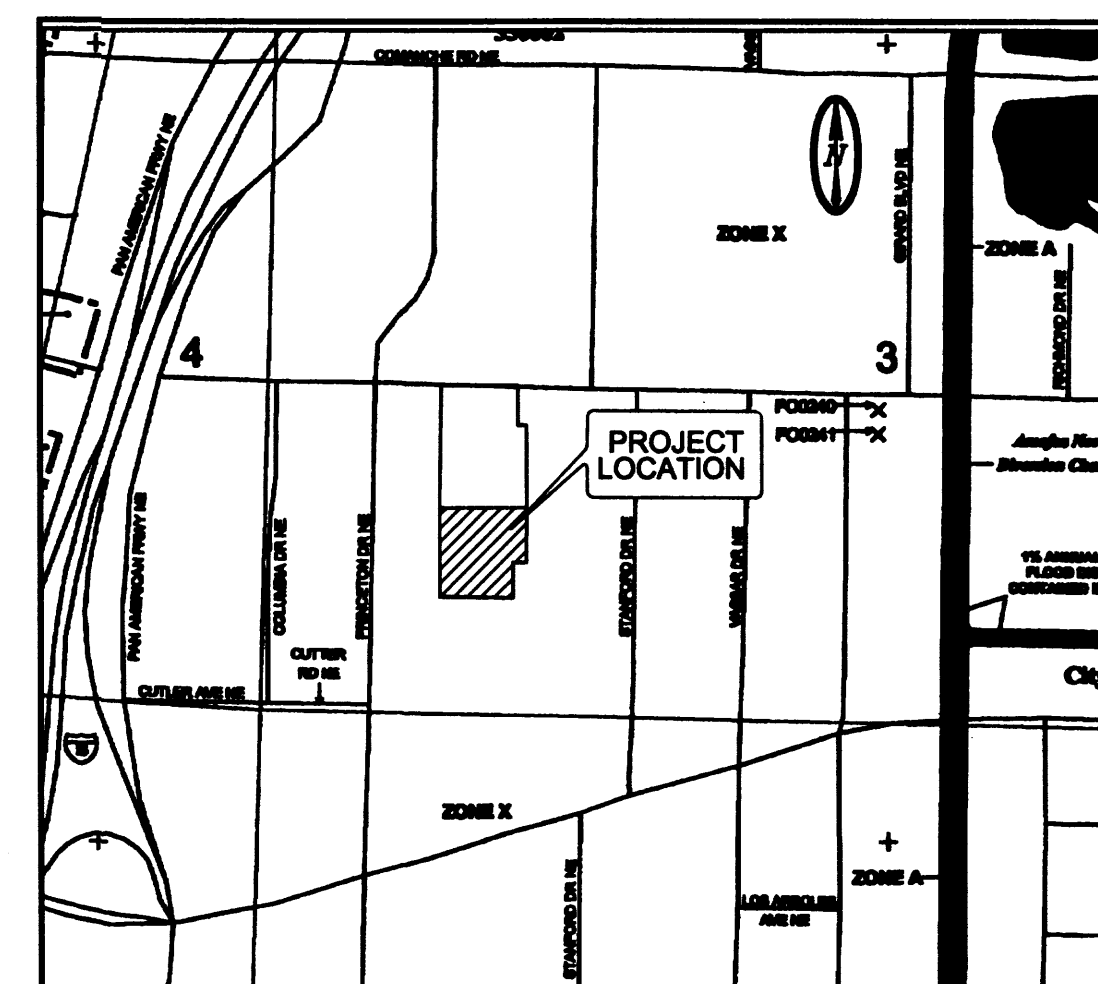
- EXISTING STANDARD CONCRETE CURB AND GUTTER.
- EXISTING ASPHALT PAVEMENT.
- EXISTING FIRE HYDRANT.
- EXISTING CONCRETE SIDEWALK.
- EXISTING FIRE VALVE.
- EXISTING TRANSFORMER.
- EXISTING WATER METER.
- EXISTING DRIVEWAY.
- EXISTING GATE.
- EXISTING RUBBLE PILE TO BE REMOVED AND DISPOSED.
- EXISTING ASPHALT TO REMAIN.
- EXISTING CONCRETE PAD TO REMAIN.
- EXISTING 6" HIGH CHAIN LINK FENCE.
- EXISTING EDGE OF ASPHALT.
- EXISTING RETAINING WALL.
- EXISTING LOADING DOCK.

GRADING AND DRAINAGE PLAN

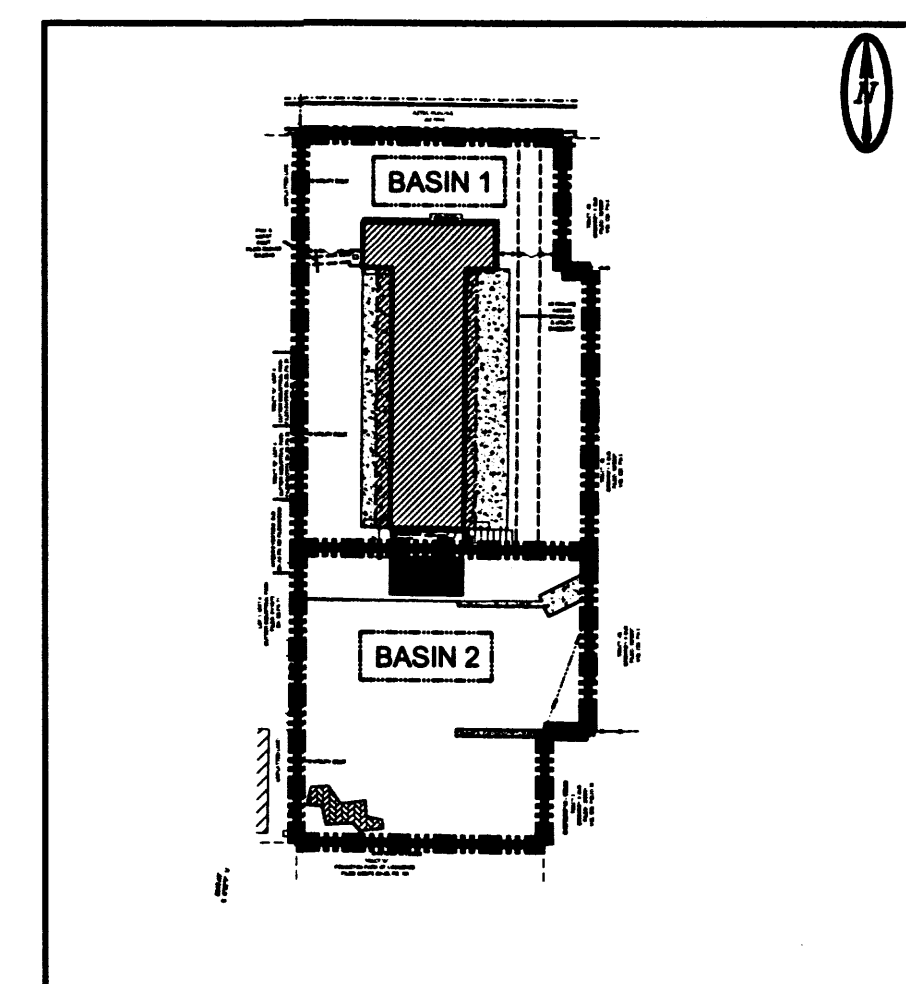
SCALE: 1" = 50'-0"



VICINITY MAP ZAP G-16-Z NTS



FIRM PANEL 35001C0351E NTS



PROPOSED BASIN MAP NTS

LEGEND

ITEM	EXISTING	PROPOSED
CURB AND GUTTER		
LIGHT POLE		
OVERHEAD UTILITY WITH POWER POLE		
SPOT ELEVATION	x 5116.70	16.7
WATER METER		
GATE		
TOP OF WALL ELEVATION	EX TW 07.56	
CONTOUR W/ ELEVATION	4992	82
	4990	90
BASIN BOUNDARY		
ASPHALT PAVING		
CONCRETE		
DRAINAGE SWALE		
DIRECTION OF FLOW		
BUILDING		
CHAIN LINK FENCE		
RIGHT OF WAY BOUNDARY		
RETAINING WALL		
EXISTING RUBBLE PILE		

DRAINAGE PLAN NOTES

- BLI recommends that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.
- This Plan recommends positive drainage away from all structures to prohibit ponding of runoff which may cause structural settlement. Future alteration of grades adjacent to the proposed structures is not recommended.
- Irrigation within 10 feet of any proposed structure is not recommended. Introduction of irrigation water into subsurface soils adjacent to the structure could cause settlement.
- This Plan is prepared to establish on-site drainage and grading criteria only. BLI assumes no responsibility for subsurface analysis, foundation/structural design, or utility design.
- Local codes may require all footings to be placed in natural undisturbed soil. If the Contractor plans to place footings on engineered fill, a certification by a registered Professional Engineer will be required. If the contractor wishes BLI to prepare the Certification, we must be notified PRIOR to placement of the fill.
- BLI recommends that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.
- The property boundary shown on this Plan is given for information only to describe the project limits. Property boundary information shown hereon does not constitute a boundary survey. A boundary survey performed by a licensed New Mexico Registered Professional Surveyor is recommended prior to construction.
- All spot elevations are top of pavement unless noted otherwise.

ALL ACCESSIBLE IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT. FAILURE TO DO SO MAY RESULT IN REJECTION OF CERTIFICATE OF OCCUPANCY.

PROJECT HYDROLOGY								
AHYMO								
ZONE:	3							
P ₆ HOUR	2.60"							
P ₁₀ DAY	4.90"							
R&L CARRIERS								
UNDEVELOPED:								
BASIN	AREA (ac)	A (ac)	B (ac)	C (ac)	D (ac)	E	Q (cfs)	VOL (ac ft)
1	4.97	0.00	0.00	0.25	4.72	2.07	22.9	0.857
2	3.46	0.00	0.00	3.46	0.00	1.13	10.8	0.325
DEVELOPED (PROPOSED):								
BASIN	AREA (ac)	A (ac)	B (ac)	C (ac)	D (ac)	E	Q (cfs)	VOL (ac ft)
1	4.97	0.00	0.00	0.25	4.72	2.07	22.9	0.857
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PROJECT DATA

PROPERTY ADDRESS
2350 AZTEC ROAD NE
LEGAL DESCRIPTION
TRACT 1A-2 & 1A-1,
GROWNEY II SUBDIVISION
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NM
PROPERTY ZONING
M-1

MAPPING

ALL PROJECT SURVEYING
BY BRASHER & LORENZ, INC.
DECEMBER, 2007
PROJECT BENCHMARK
ACS MONUMENT "S-G17"
ELEVATION 5138.195 FEET
1988 NAVD

HYDROLOGY CERTIFICATION FOR PERMANENT CERTIFICATE OF OCCUPANCY

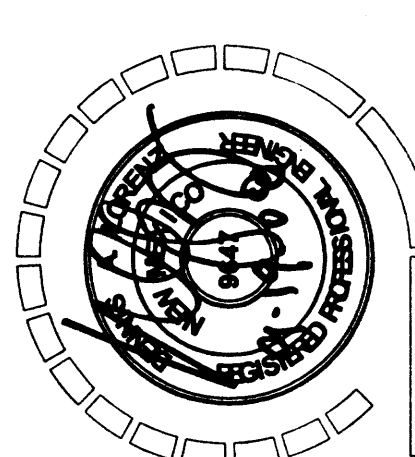
I, Dennis A. Lorenz, NMPE 9647, of the firm Brasher and Lorenz, Inc., hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 09-19-2008. The record information edited onto the original design document has been obtained by me or under my direct supervision and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Permanent Certificate of Occupancy.

The record information presented hereon is not necessarily complete and is 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.

Dennis A. Lorenz, NMPE 9647
REGISTERED PROFESSIONAL ENGINEER

RECEIVED
JUN 05 2009
HYDROLOGY SECTION

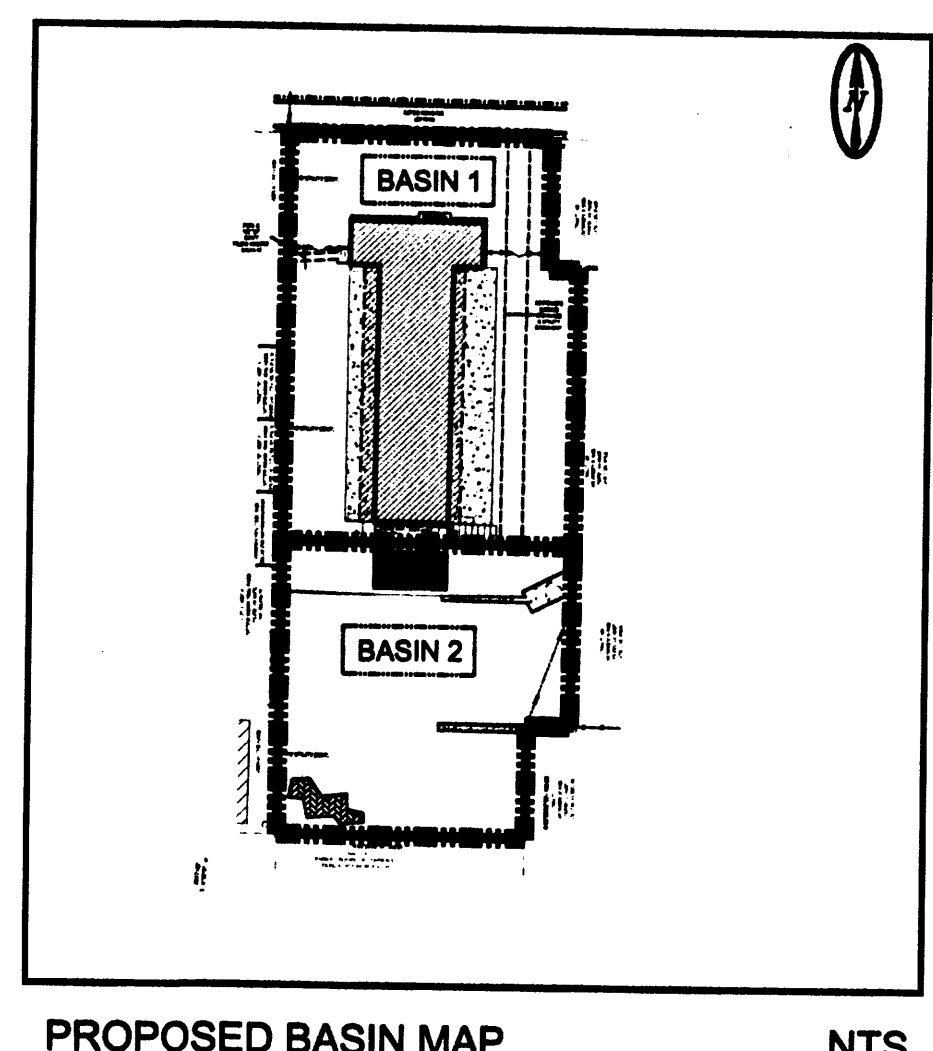
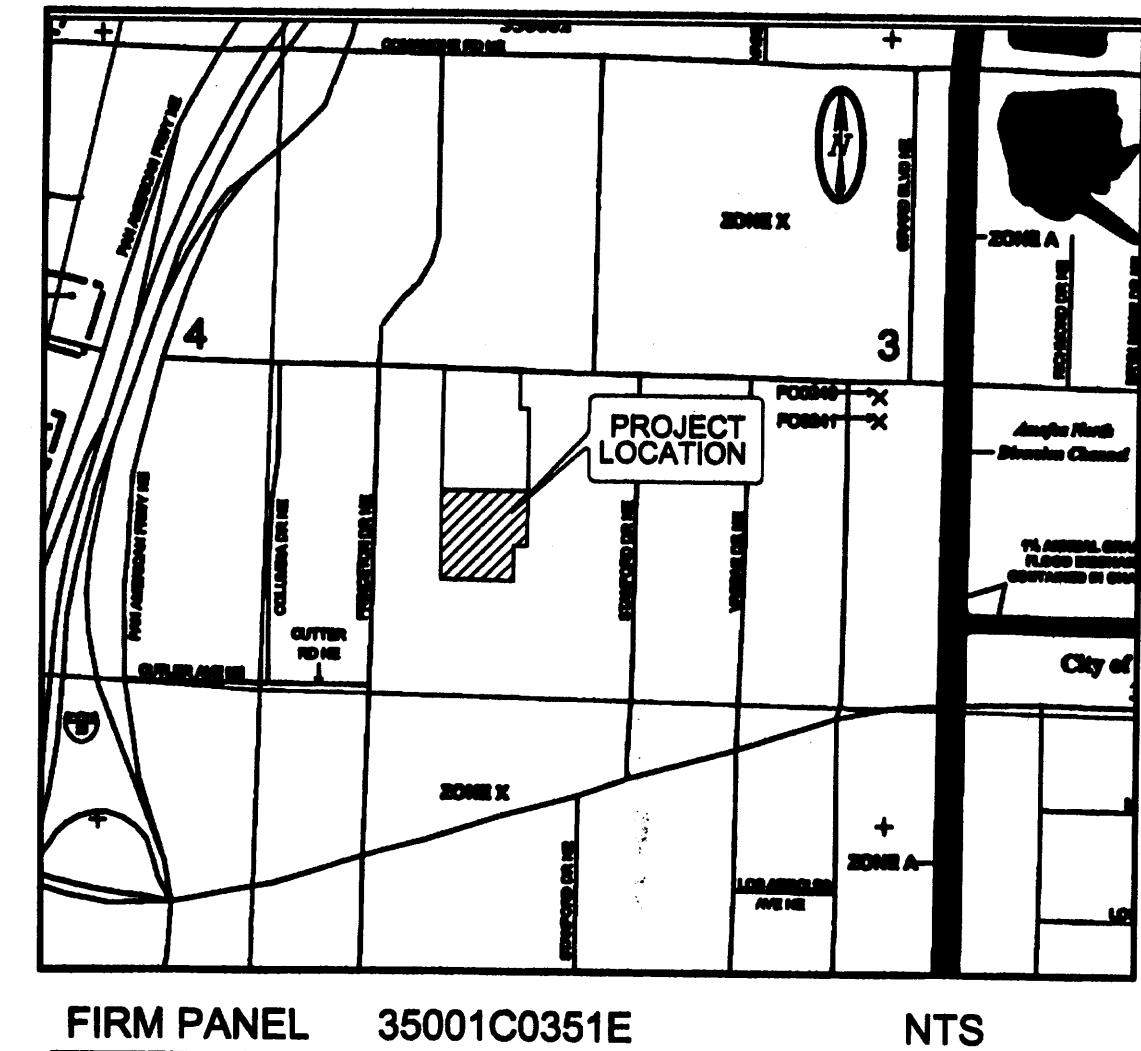
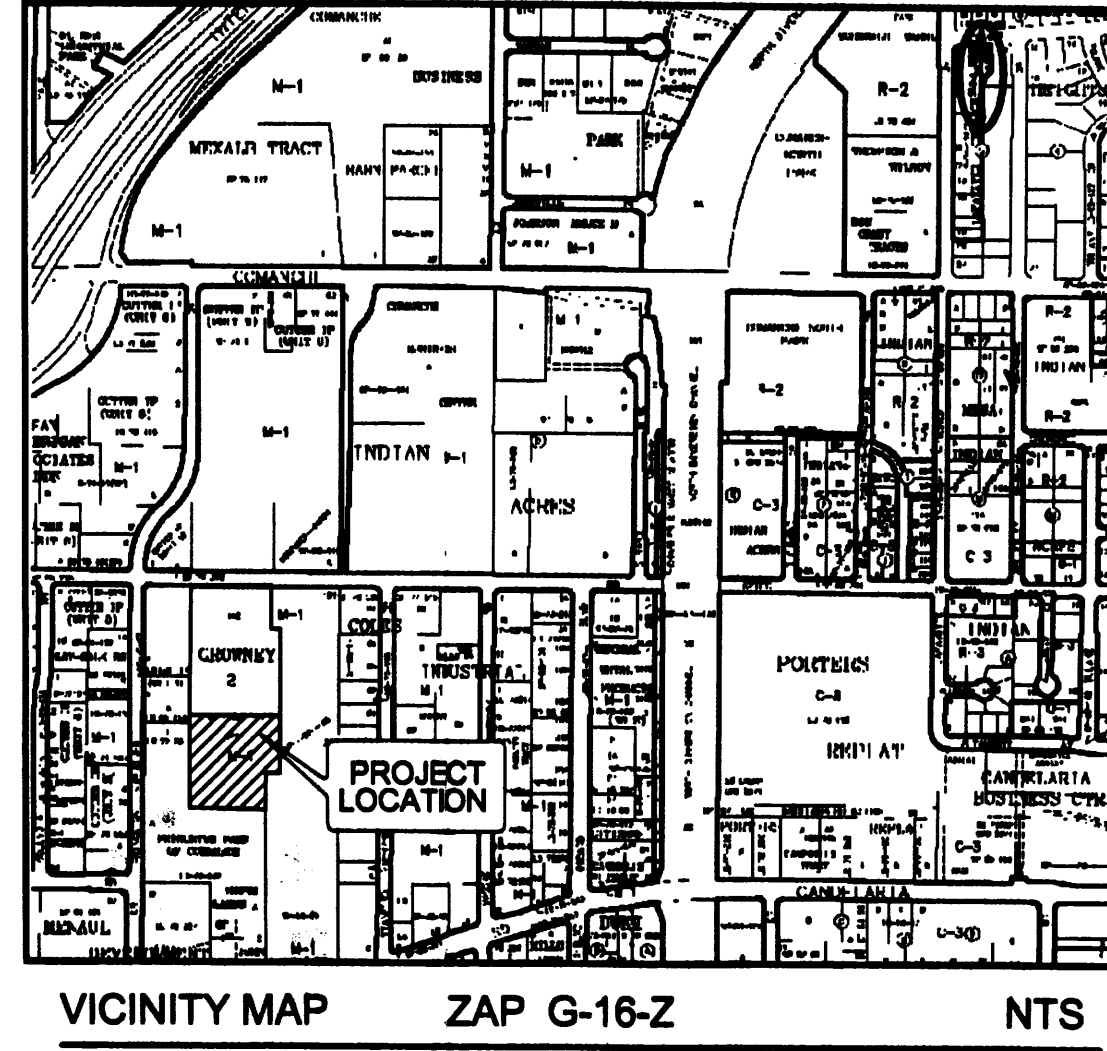
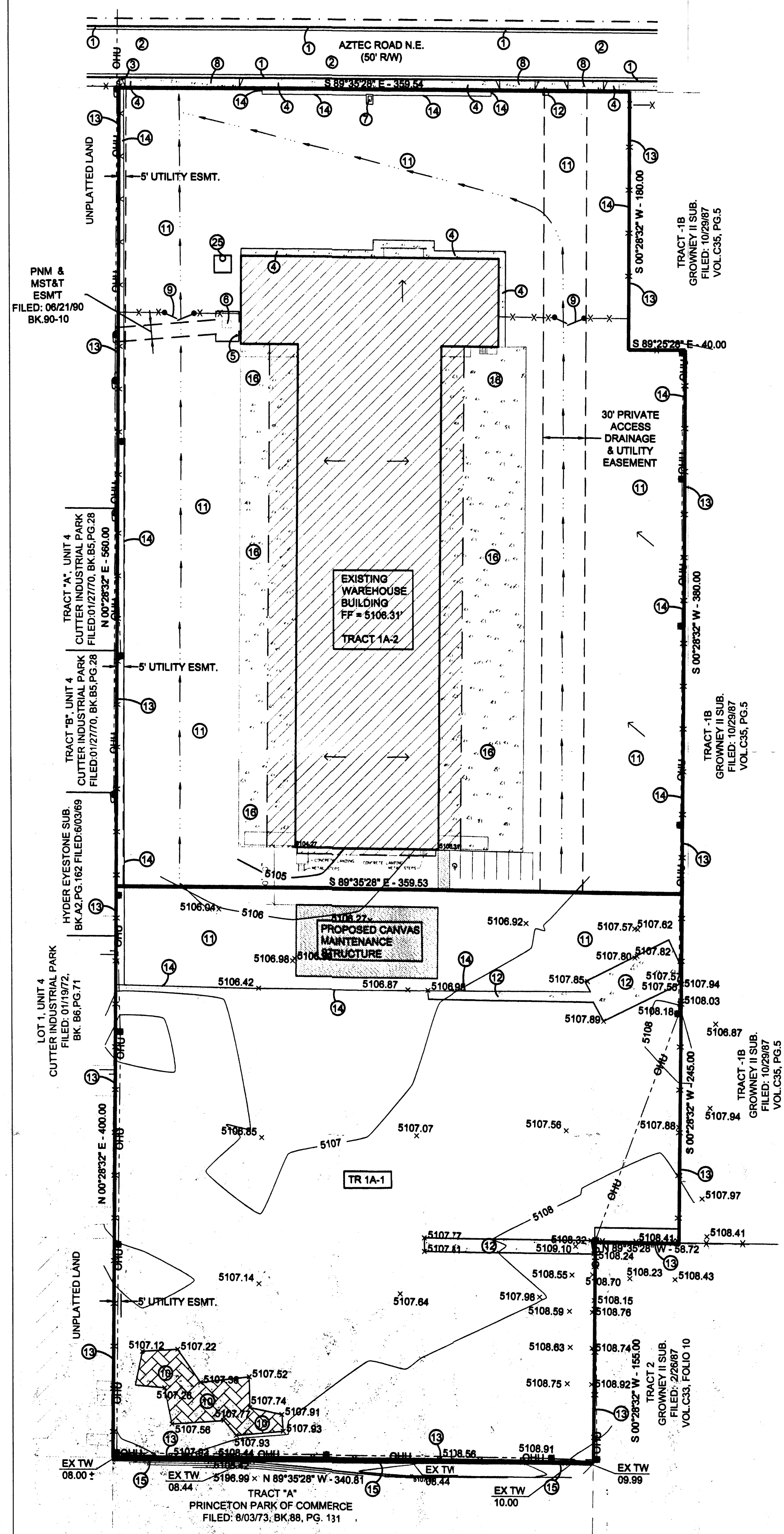
Project no. 0701
sheet
C-2
1 of 2
date 09-18-08



BRASHER & LORENZ
CONSULTING ENGINEERS
2201 San Pedro NE Building 1 Suite 1300
Albuquerque, New Mexico 87110
Ph: 505-488-0068 Fax: 505-488-0188

R&L CARRIERS
2350 AZTEC ROAD N.E.
ALBUQUERQUE, NEW MEXICO

SANDERS & ASSOCIATES ARCHITECTS, P.C. 5921 LOMAS BLVD. N.E. SUITE B ALBUQUERQUE N.M. 87110 (505) 255-5040 FAX (505) 255-5040



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PROPERTY ZONING	
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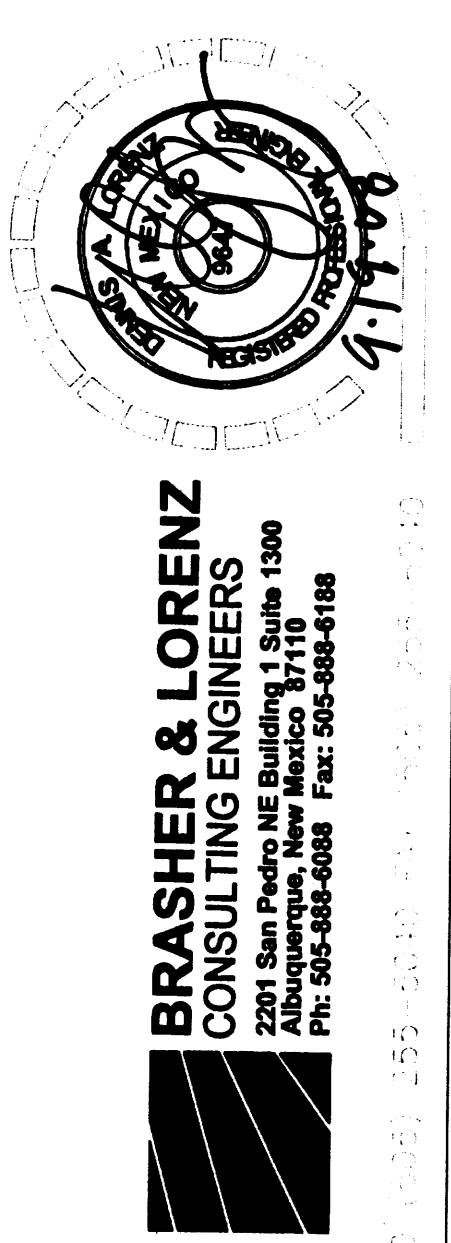
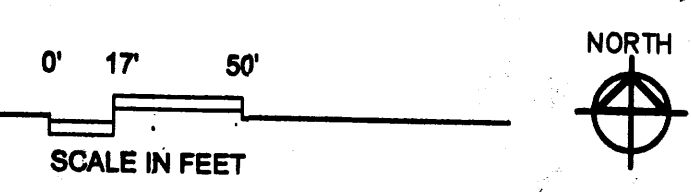
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CONCRETE		
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DIRECTION OF FLOW		
BUILDING		
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RIGHT OF WAY BOUNDARY		
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KEYED NOTES

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2. EXISTING ASPHALT PAVEMENT.
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GRADING AND DRAINAGE PLAN

SCALE: 1" = 50'-0"



BRASHER & LORENZ
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