

05-13-09 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE DRAINAGE OF THE

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND

DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT

ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING

INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND

SITE IS ESSENTIALLY IN ACCURDANCE WITH THE APPROVED PLAN.

IT FOR ANY OTHER PURPOSE.

May 13, 2009

EROSION CONTROL NOTES:

FROM FLOODING BY RUNOFF FROM THE SITE.

THE DOWNSTREAM PERIMETER OF THE PROPERTY.

DURING CONSTRUCTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE FOLLOWING:

1. NO SEDIMENT-BEARING WATER SHALL BE ALLOWED TO DISCHARGE FROM THE SITE

DURING GRADING OPERATIONS AND UNTIL THE PROJECT HAS BEEN COMPLETED,

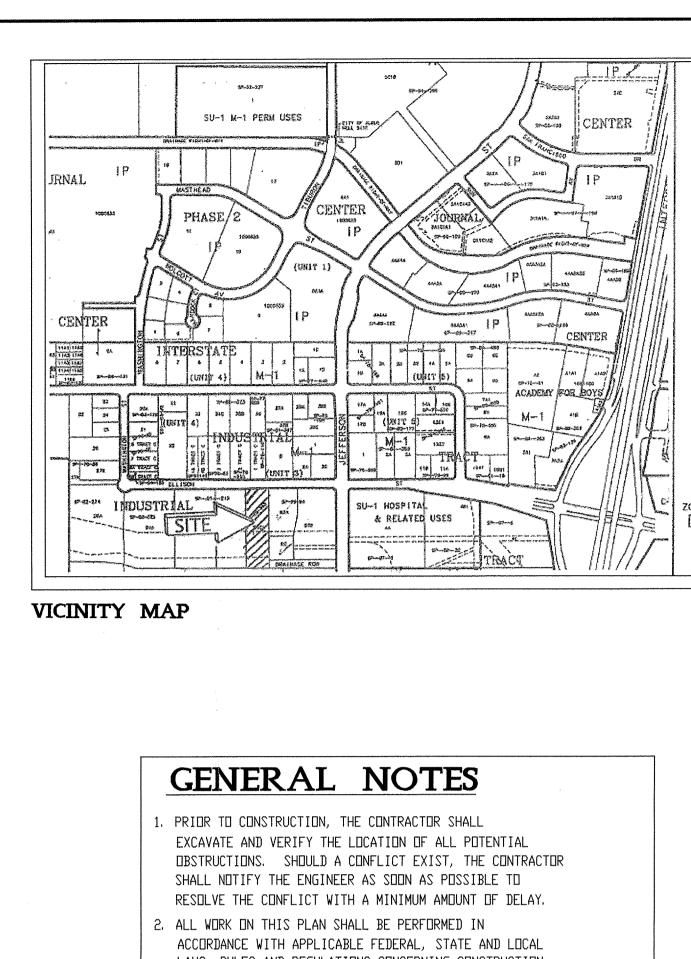
OF-WAY ANY AND ALL SEDIMENT ORIGINATING FROM THE SITE.

ALL ADJACENT PROPERTY, RIGHTS-OF-WAY, AND EASEMENTS SHALL BE PROTECTED

SHOULD THE CONTRACTOR FAIL TO PREVENT SEDIMENT-BEARING WATER FROM ENTER-ING PUBLIC RIGHT-DF-WAY, HE SHALL PROMPLTY REMOVE FROM THE PUBLIC RIGHT-

CONTROL OF SEDIMENT-LADEN WATERS WILL BE ACCOMPLISHED BY USE OF A COM-

PACTED EARTH BERM OF ADEQUATE HEIGHT. THE BERM SHALL BE LOCATED ALONG



TEMPORARY BENCH MARK (TBM) N. RIM OF EXISTING SAS MANHOLE

RIM5135.11

INV. 5108. 70 $\overline{\Psi}$

ELEVATION = 5108. 70

-10' UTILITY ESMT.

P. N. M. & U. S. WEST

(C38-140) [#13}

RACT 11-2 INDUSTRIAL 1 2, BK C20, PG, 7

TRACI 79

175. 02′

DRAINAGE R. D. W.

INTERSTATE INDUSTRIAL TRACT

5/10/99, BK 99C, PG 110

↑ 175. 02′

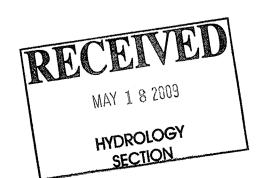
NEW DOWNSPOUT - DRAINS INTO EXIST. ASPHALT PARKING LOT

SLOPES NORTH TO A SINGLE

- LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- 3. IF ANY UTILITY LINES, PIPELINES, DR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE LOCATION ONLY, AND LINES MAY EXIST WHERE NONE ARE SHOWN. THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE UTILITY OWNER OR FROM EXISTING PLANS. AND THIS INFORMATION MAY BE INCOMPLETE HAS NOT UNDERTAKEN ANY FIELD VERIFICATION OF THESE LOCATIONS, LINE SIZES OR MATERIAL TYPE, MAKES NO REPRESENTATION THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATIONS OF ANY UTILITY LINE, PIPELINE OR UNDERGROUND INSTALLATION IN OR NEAR THE AREA IN ADVANCE OF OR DURING ANY EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES AND UNDERGROUND FACILITIES IN PLANNING AND CONDUCTING EXCAVATIONS, THE CONTRACTOR SHALL COMPLY WITH ALL STATE STATUTES, MUNICIPAL AND LOCAL DRDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
- 4. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHTS-OF-WAY OR ONTO PRIVATE PROPERTY, THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AND BY WETTING THE SOIL TO KEEP IT FROM BLOWING.
- 5. THE CONTRACTOR SHALL OBTAIN ANY AND ALL PERMITS REQUIRED BY THE CITY OF ALBUQUERQUE FOR THE COMPLETION OF THE WORK PRIOR TO BEGINNING CONSTRUCTION.

LEGAL DESCRIPTION:

TRACT D-1-C-1INTERSTATE INDUSTRIAL TRACT



MAY 18, 2009

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JOB	NO:	7	710)	
DATE	<u>:</u> :	MAY	18,	2009	
			REVIS	IONS	

SHEET NO.

OF

The site, as shown by the Vicinity Map, is located on the south side of Ellison Street NE Between Jefferson Street NE and Washington Street NE. At present, the site is developed with a 50° x 100° (approx.) commercial building and asphalt parking. Adjacent properties to the East and West are developed. To the south of the site is a lined concrete channel. The Flood Insurance Rate Map (FIRMETTE - SEE INSET) shows the... 1% annual chance flood discharge contained in channel. This channel is known as the Pino Canyon Channel. However, flows generated from the existing and proposed construction will discharge north into Ellison Street. Construction will be confined to the north end of the property, and only the northerly 240 feet of the site will be considered. At present, runoff generated by the site east of the building ridge line flows out through the parking lot which is graded to flow through the driveway into Ellison Street. Runoff generated south of the building and east of the ridge line flows north through the swale, which is also a driveway, that is west of the building, and out through the drivepad into Ellison Street. PROPOSED CONDITIONS:

It is proposed to construct a 50' long addition to the existing building. No additional pavement will be constructed. Drainage of the east side of the new addition will be conveyed around the south end of the addition by gravel swale and discharged through the existing driveway. DRAINAGE CRITERIA:

The calculations shown on this plan were prepared in accordance with Section 22.2, Hydrology, of the Development Process Manual, Volume 2, Design Criteria, for the City of Albuquerque in cooperation with Bernalillo County, New Mexico and the Metropolitan Arroyo Flood Control Authority, January, 1993. PRECIPITATION ZONE:

The site is between the Rio Grande River and San Mateo Blvd. and is, therefore, in

Precipitation Zone 2. LAND TREATMENT AREAS, ETC.:

The peak discharge per acre and excess precipitation are shown for the four land treatments in Zone 2 in the table below, and the values shown are from the City of Albuquerque D. P. M.

LAND		CH q (cfs/ac)	EXCESS PRECIP E (in)	
TREAT.	100-yr.	10-yr.	100-yr. 10-yr.	
Α	1. 56	0. 38	0. 53 0. 13	
В	2. 28	0. 95	0. 78 0. 28	
C	3. 14	1. 71	1. 13	
D	4. 70	3. 14	2. 12	



DRAINGAE CALCULATIONS - EXISTING CONDITIONS:

EXISTING LAND TREATMENT AREAS:

Roof Area = $50' \times 100' = 5,000 \text{ sf } (0.1148 \text{ Ac}) \text{ Treat. D}$ Paved Area = 11,395 sf (0.2616 Ac) Treat. D Landscaped Area = 6,600 sf (0.1515 Ac) Treat. B Undeveloped = 18,130 sf (0.4162 Ac) Treat. C Total 41,125 (0.9441 Ac)

EXISTING WEIGHTED UNIT PEAK DISCHARGE (qw) PER ACRE:

100 year qw = (2.28 \times 0.1515 + 3.14 \times 0.4162 + 4.70 \times 0.3764) / 0.9441 = 3.62 cfs/ac 10 year qw = (0.95 \times 0.1515 + 1.71 \times 0.4162 + 3.14 \times 0.3764) / 0.9441 = 2.16 cfs/ac

EXISTING WEIGHTED EXCESS PRECIPITATION:

100 year Ew = (0.78 \times 0.1515 + 1.13 \times 0.4162 + 2.12 \times 0.3764) / 0.9441 = 1.47 in 10 year Ew = (0.28 \times 0.1515 + 0.52 \times 0.4162 + 1.34 \times 0.3764) / 0.9441 = 0.81 in

EXISTING PEAK DISCHARGE:

 $Q100 = qw \times area = 3.62 cfs/acre X 0.9441 acre = 3.42 cfs$ $Q10 = qw \times area = 2.16 cfs/acre X 0.9441 acre = 2.04 cfs$

EXISTING VOLUME, 100-YEAR AND 10-YEAR, 6-HOUR:

 $V100 = (Ew \times area) / 12 = (1.47 \times 41, 125) / 12 = 5,038 cf$ $V10 = (Ew \times area) / 12 = (0.81 \times 41, 125) / 12 = 2,776 cf$



DRAINGAE CALCULATIONS - PROPOSED CONDITIONS:

PROPOSED LAND TREATMENT AREAS:

Roof Area = $50' \times 150' = 7,500 \text{ sf } (0.1722 \text{ Ac})$ Treat. D Paved Area = 10,395 sf (0.2386 Ac) Treat. D Landscaped Area = 6,600 sf (0,1515 Ac) Treat, B Undeveloped = 16,630 sf (0.3818 Ac) Treat C Total 41,125 (<u>0.9441 Ac</u>)

PROPOSED WEIGHTED UNIT PEAK DISCHARGE (qw) PER ACRE:

100 year qw = $(2.28 \times 0.1515 + 3.14 \times 0.3818 + 4.70 \times 0.4108) / 0.9441 = 3.68 cfs/ac$ 10 year gw = $(0.95 \times 0.1515 + 1.71 \times 0.3818 + 3.14 \times 0.4108) / 0.9441 = 2.21 cfs/ac$

PROPOSED WEIGHTED EXCESS PRECIPITATION:

100 year $Ew = (0.78 \times 0.1515 + 1.13 \times 0.3818 + 2.12 \times 0.4108) / 0.9441 = 1.50 in 10 year <math>Ew = (0.28 \times 0.1515 + 0.52 \times 0.3818 + 1.34 \times 0.4108) / 0.9441 = 0.84 in$

EXISTING PEAK DISCHARGE:

 $Q100 = qw \times area = 3.68 cfs/acre X 0.9441 acre = 3.47 cfs$ Q10 = $qw \times area = 2.21 cfs/acre \times 0.9441 acre = 2.09 cfs$

EXISTING VOLUME, 100-YEAR AND 10-YEAR, 6-HOUR:

 $V100 = (Ew \times area) / 12 = (1.50 \times 41, 125) / 12 = 5,141 cf$ $V10 = (Ew \times area) / 12 = (0.84 \times 41,125) / 12 = 2,879 cf$

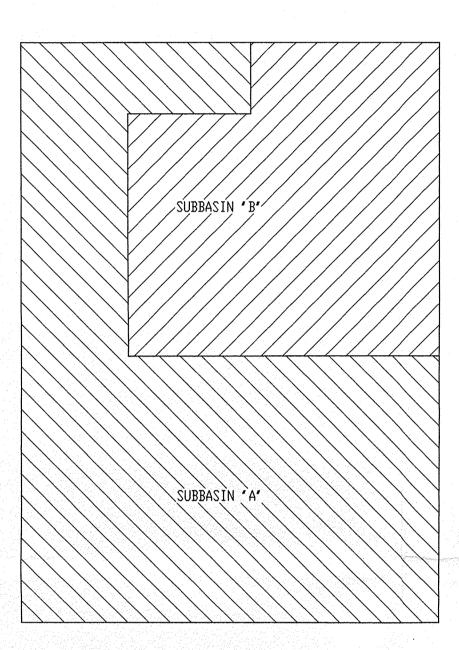
SUMMARY	OF	ON-SITE	VOLUMES	AND	DISCH.	RATES:

	V100(CF)	V10(CF)	Q100(CFS)	Q10(CFS)
[∨] DEVELOPED	5, 141	2,879	3. 47	2. 09
✓ EXISTING	5, 038	2,776	3, 42	2, 04
INCREASE	103	103	0, 05	0.05

NOTE: THE PREVIOUS DRAINAGE PLAN EVALUATED THE SAME AREA WITH THE FOLLOWING DISCHARGE QUANTITIES: VUNDEVEL□PED Q100 = 2.0 CFS \searrow DEVELOPED Q100 = 2.7 CFS

OFF-SITE FLOW:

There is no off-site flow associated with this site. The lot east of the site drains to Ellison Street and to the drainage channel to the south.



SUBBASIN "A" WEIGHTED UNIT PEAK DISCHARGE (qw) PER ACRE:

100 year qw = $(2.28 \times 0.0507 + 3.14 \times 0.3825 + 4.70 \times 0.1584) / 0.5916 = 3.48 cfs/ac$ 10 year qw = (0.95 × 0.0507 + 1.71 × 0.3825 + 3.14 × 0.1584) / 0.5916 = 2.02 cfs/ac

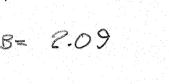
SUBBASIN "A" PEAK DISCHARGE:

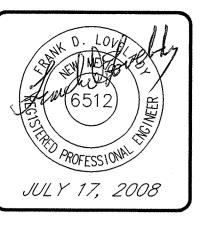
 $-0.100 = qw \times area = 3.48 cfs/acre X 0.5916 acre = 2.05 cfs$ $-0.00 = qw \times area = 2.02 cfs/acre X 0.5916 acre = 1.20 cfs$

SUBBASIN "B" PEAK DISCHARGE:

Q100 = 3.47 - 2.05 = 1.42 CFS-010 = 2.09 - 1.20 = 0.89 CFS

P100 A4B= 2.09



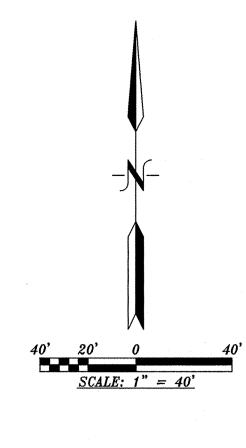


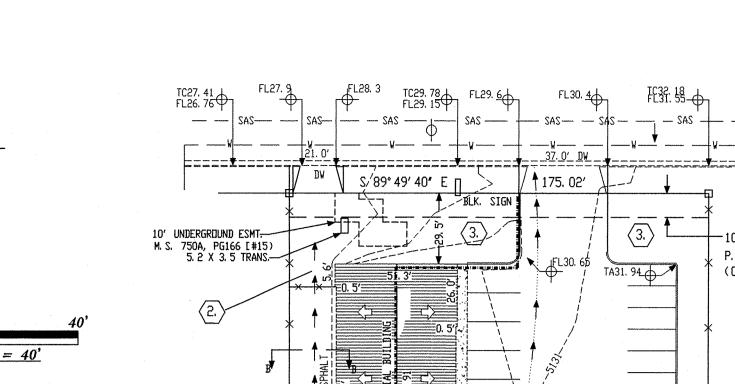
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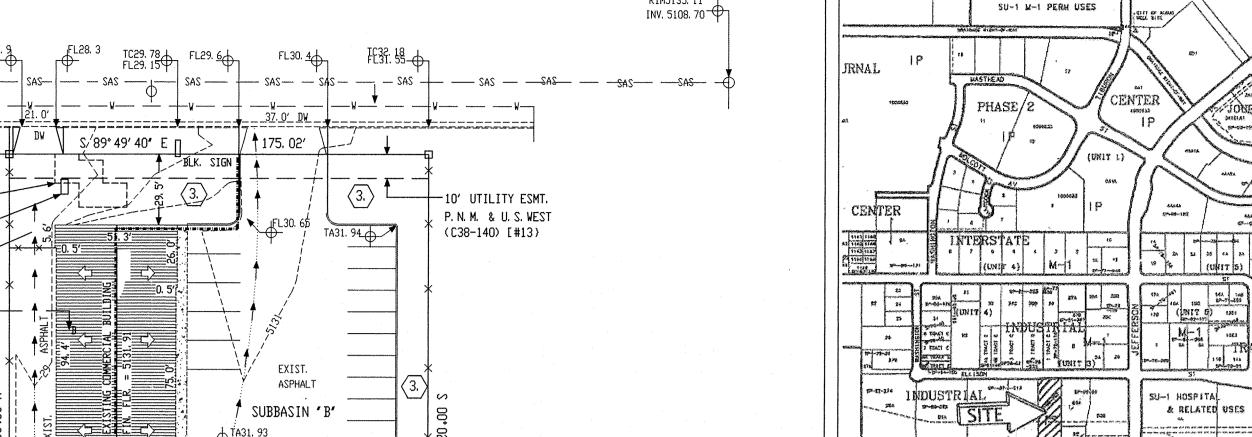
JOB NO: **710** DATE: JULY 17, 2008 REVISIONS

SHEET NO.

JUL 182008







TEMPORARY BENCH MARK (TBM) N. RIM OF EXISTING SAS MANHOLE

ELEVATION = 5108, 70

VICINITY MAP

GENERAL NOTES

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATION OF ALL POTENTIAL DBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SOON AS POSSIBLE TO RESOLVE THE CONFLICT WITH A MINIMUM AMOUNT OF DELAY.

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2. ALL WORK ON THIS PLAN SHALL BE PERFORMED IN ACCURDANCE WITH APPLICABLE FEDERAL, STATE AND LUCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.

3. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE LOCATION ONLY, AND LINES MAY EXIST WHERE NONE ARE SHOWN. THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE UTILITY OWNER OR FROM EXISTING PLANS, AND THIS INFORMATION MAY BE INCOMPLETE OR OBSOLETE AT THE TIME OF CONSTRUCTION. THE ENGINEER HAS NOT UNDERTAKEN ANY FIELD VERIFICATION OF THESE LOCATIONS, LINE SIZES OR MATERIAL TYPE, MAKES NO REPRESENTATION THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATIONS OF ANY UTILITY LINE, PIPELINE OR UNDERGROUND INSTALLATION IN OR NEAR THE AREA IN ADVANCE OF OR DURING ANY EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES AND UNDERGROUND FACILITIES IN PLANNING AND CONDUCTING EXCAVATIONS, THE CONTRACTOR SHALL COMPLY WITH ALL STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.

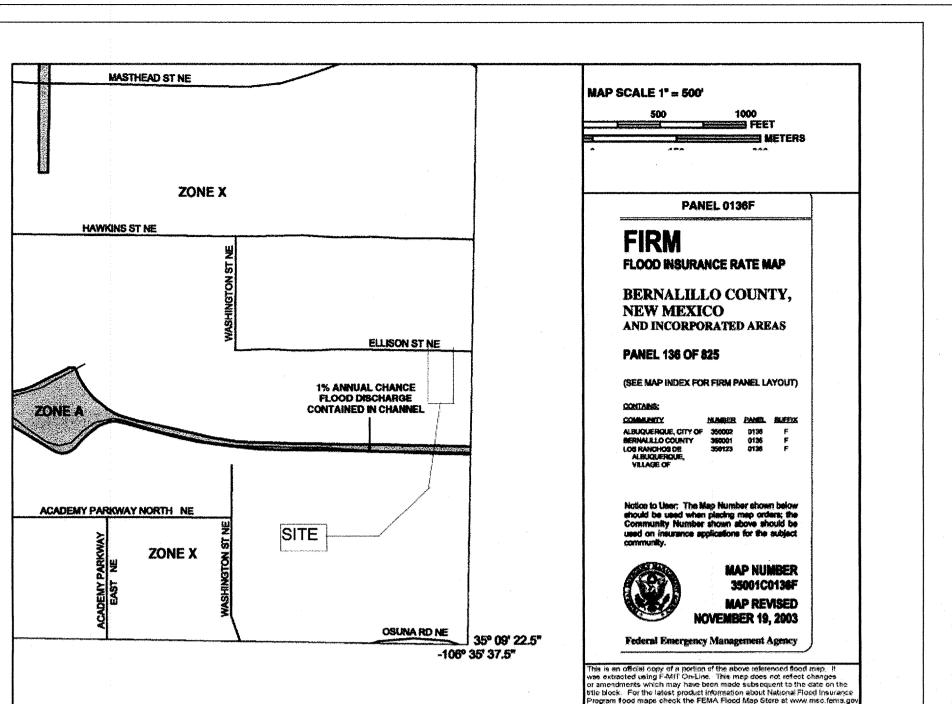
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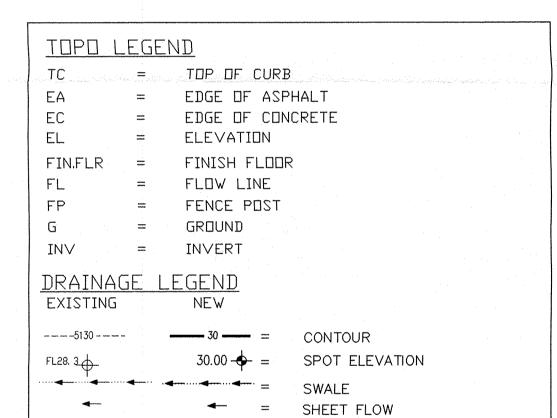
LEGAL DESCRIPTION:

TRACT D-1-C-1INTERSTATE INDUSTRIAL TRACT

RECEIVED JUL 182008 HYDROLOGY SECTION



FIRMETTE



GENERAL NOTES:

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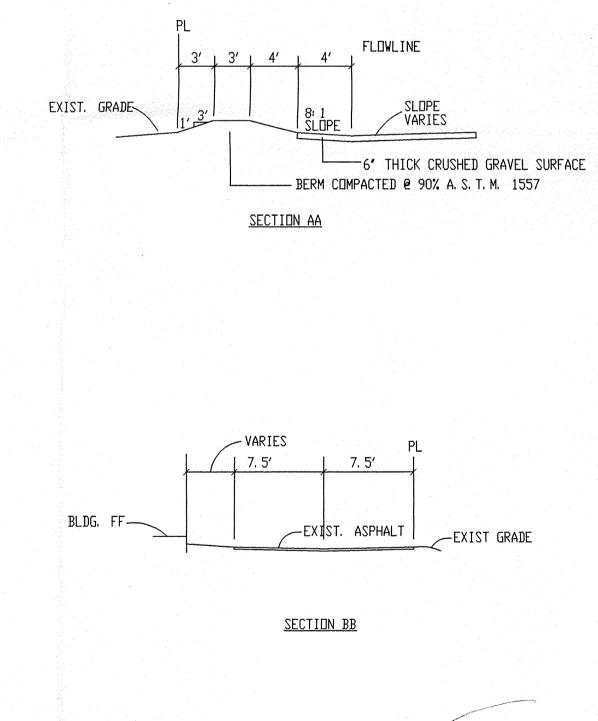
- 1: CONTOUR INTERVAL IS ONE (1) FOOT.
- 2: ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE STATION No. "9-D17" WHICH HAS BEEN DESTROYED. SINCE THE FINISH FLOOR ELEVATION IS ALREADY FIXED, BRINGING IN A NEW BENCH MARK IS UNNECESSARY. TEMPORARY BENCH MARK (TBM) IS BASED ON THE PREVIOUS APPROVED GRADING PLAN.

ROOF FLOW

- 3: UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT INFORMATION PROVIDED BY THE CLIENT. UTILITIES SHOWN HEREON, WHETHER INDICATED AS ABANDONED OR NOT, SHALL BE VERIFIED BY OTHERS FOR EXACT LOCATION AND/ OR DEPTH PRIOR TO EXCAVATION OR DESIGN CON-SIDERATIONS.
- 5: THIS IS NOT A BOUNDARY SURVEY. BEARINGS AND DISTANCES SHOWN HEREON ARE FOR REFERENCE ONLY.

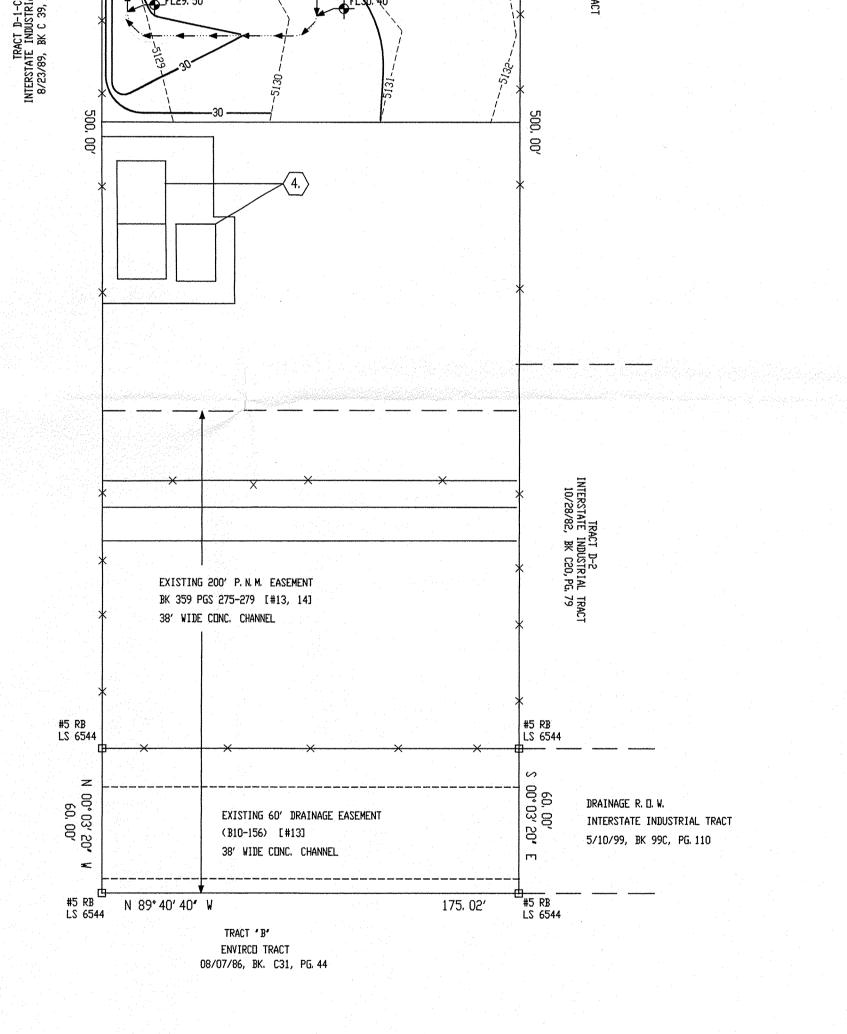
EROSION CONTROL NOTES:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE FOLLOWING: . NO SEDIMENT-BEARING WATER SHALL BE ALLOWED TO DISCHARGE FROM THE SITE DURING CONSTRUCTION.
- DURING GRADING OPERATIONS AND UNTIL THE PROJECT HAS BEEN COMPLETED, ALL ADJACENT PROPERTY, RIGHTS-OF-WAY, AND EASEMENTS SHALL BE PROTECTED FROM FLOODING BY RUNDFF FROM THE SITE.
- SHOULD THE CONTRACTOR FAIL TO PREVENT SEDIMENT-BEARING WATER FROM ENTER-ING PUBLIC RIGHT-DF-WAY, HE SHALL PROMPLTY REMOVE FROM THE PUBLIC RIGHT-OF-WAY ANY AND ALL SEDIMENT ORIGINATING FROM THE SITE.
- 4. CONTROL OF SEDIMENT-LADEN WATERS WILL BE ACCOMPLISHED BY USE OF A COM-PACTED EARTH BERM OF ADEQUATE HEIGHT. THE BERM SHALL BE LOCATED ALONG THE DOWNSTREAM PERIMETER OF THE PROPERTY.

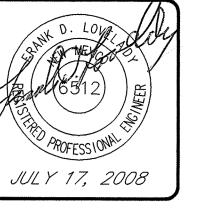


KEYED NOTES

- 1. PROPOSED 50 FOOT ADDITION TO EXISTING BUILDING. MATCH EXISTING FINISH FLOOR ELEVATION.
- 2. EXISTING PAVED ALLEY.
- 3. EXISTING LANDSCAPING.
- 4. EXISTING METAL SHEDS ON CONCRETE PAD.



SUBBASIN "A"



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JOB NO	710	
DATE:	JULY 17, 2008	
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