



# *City of Albuquerque*

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

November 2, 1995

R.G. Lee  
Lee Engineering  
2316 Calle de Rafael NE  
Albuquerque, NM 87122

RE: ENGINEER CERTIFICATION FOR WESTERN METAL WORKS OFFICE &  
WAREHOUSE FACILITIES (C17-D1A6) CERTIFICATION STATEMENT  
DATED 10/30/95.

Dear Mr. Lee:

Based on the information provided on your November 1, 1995  
submittal, Engineer Certification for the above referenced site  
is acceptable.

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

Sincerely,

Bernie J. Montoya, CE  
Engineering Associate

BJM/dl

c: Western Metal Works  
Andrew Garcia  
File

## DRAINAGE INFORMATION SHEET

PROJECT TITLE Western Metal Works ZONE ATLAS/DRWNG. FILE #: C-17/D-1A6

LEGAL DESCRIPTION: LOT 34A, CLIFORD INDUSTRIAL PARK

CITY ADDRESS: WASHINGTON ST. N.E.

ENGINEER FIRM: LEE ENGINEERING CONTACT: R.G. Lee, Jr.

ADDRESS: 2316 CALLE DE REFAEL N.E. PHONE: (505) 822-8999

ALBUQUERQUE N.M. 87122

ARCHITECT: \_\_\_\_\_ CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

OWNER: \_\_\_\_\_ CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

SURVEYOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_ CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

### PRE-DESIGN MEETING:

\_\_\_\_ YES

\_\_\_\_ DRB NO.

X NO

\_\_\_\_ EPC NO.

\_\_\_\_ COPY OF CONFERENCE RECAP

\_\_\_\_ PROJ.NO

\_\_\_\_ SHEET PROVIDED

### TYPE OF SUBMITTAL:

\_\_\_\_ DRAINAGE REPORT

\_\_\_\_ DRAINAGE PLAN

\_\_\_\_ CONCEPTUAL GRADING & DRAINAGE

\_\_\_\_ GRADING PLAN

\_\_\_\_ EROSION CONTROL PLAN

X ENGINEER' CERTIFICATION

### CHECK TYPE OF APPROVAL SOUGHT:

\_\_\_\_ SKETCH PLAT APPROVAL

\_\_\_\_ PRELIMINARY PLAT APPROVAL

\_\_\_\_ SITE DEVELOPMENT PLAN APPROVAL

\_\_\_\_ FINAL PLAT APPROVAL

\_\_\_\_ BUILDING PERMIT APPROVAL

\_\_\_\_ ROUGH GRADING PERMIT APPROVAL

\_\_\_\_ GRADING/PAVING PERMIT APPROVAL

X OTHER "CERTIFICATE OF OCCUPANCY

DATE SUBMITTED: OCTOBER 31, 1995

BY: Herman Hood

NOV - 1 1995  
CITY OF ALBUQUERQUE  
DEVELOPMENT DEPARTMENT

REFERENCES:

- A. SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA FOR THE CITY OF ALBUQUERQUE, NEW MEXICO IN COOPERATION WITH BERNALILLO COUNTY, NEW MEXICO AND THE ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY.
- B. FLOODWAY, FLOOD BOUNDARY AND FLOODWAY MAP, CITY OF ALBUQUERQUE, NEW MEXICO, PANEL 9 OF 50.
- C. ZONE ATLAS PAGE C-17-2.

II. GENERAL INFORMATION:

- A. SITE LIES IN ZONE TWO(2) (SEE REF. A, PAGE A-1)
- B. 100 YEAR, 6 HOUR RAINFALL CRITERIA
- C. TIME OF CONCENTRATION,  $T_c$ ;  $T_c = 0.2 \text{ hr}(12 \text{ MINUTES})$ .

III. IMPERVIOUSNESS:

TREATMENT	TYPES OF SURFACES	EXISTING SQ.FT.	ACRES	PROPOSED SQ.FT.	ACRES
A	UNDEVELOPED	0	0.0000	0	0.0000
B	LANDSCAPING	0	0.0000	4907	0.1126
C	COMPACTED/VACANT	29485	0.6769	0	0.0000
D	IMPERVIOUS	400	0.0092	24978	0.5734
	TOTAL AREA (TA)	29885	0.6861	29885	0.6861

IV. PEAK DISCHARGE 100 YEAR (REF. A, TABLE A-9):

TREATMENT	TYPES OF SURFACES	EXISTING CFS/Ac	Qp(100)	PROPOSED CFS/Ac	Qp(100)
A	UNDEVELOPED	1.56	0.00	1.56	0.00
B	LANDSCAPING	2.28	0.00	2.28	0.26
C	COMPACTED/VACANT	3.14	2.13	3.14	0.00
D	IMPERVIOUS	4.70	0.04	4.70	2.70
	PEAK DISCHARGE FROM SITE		2.17 CFS		2.95 CFS

V. PEAK DISCHARGE 10 YEAR (REF. A, TABLE A-9):

TREATMENT	TYPES OF SURFACES	EXISTING CFS/Ac	Qp(10)	PROPOSED CFS/Ac	Qp(10)
A	UNDEVELOPED	0.38	0.00	0.38	0.00
B	LANDSCAPING	0.95	0.00	0.95	0.11
C	COMPACTED/VACANT	1.71	1.16	1.71	0.00
D	IMPERVIOUS	3.14	0.03	3.14	1.80
	PEAK DISCHARGE FROM SITE		1.19 CFS		1.91 CFS

VI. WEIGHTED "E" 100 YEAR, 6 HR. (REF. A, TABLE A-8):

TREATMENT	TYPES OF SURFACES	EXISTING E	EXa/TA	PROPOSED E	EXa/TA
A	UNDEVELOPED	0.53	0.00	0.53	0.00
B	LANDSCAPING	0.78	0.00	0.78	0.13
C	COMPACTED/VACANT	1.13	1.11	1.13	0.00
D	IMPERVIOUS	2.12	0.03	2.12	1.77
	WEIGHTED "E" FACTOR		1.14 IN		1.90 IN

VII. VOLUME 100 YEAR, V(360) (REF. A, TABLE A-8):

	EXISTING	PROPOSED
1.14 x 0.686/12 =	0.07 AC. FT.	
	2847.17 CU.FT	
1.90 x 0.686/12 =	0.11 AC. FT.	
	4731.74 CU.FT	

VII. BASIN "A" IMPERVIOUSNESS:						
TREATMENT	TYPES OF	EXISTING		PROPOSED		
TYPE	SURFACES	SQ.FT.	ACRES	SQ.FT.	ACRES	
A	UNDEVELOPED	10698	0.2456	0	0.0000	
B	LANDSCAPING	0	0.0000	0	0.0000	
C	COMPACTED/VACANT	0	0.0000	2298	0.0528	
D	IMPERVIOUS	0	0.0000	8400	0.1928	
TOTAL AREA (BASIN "A")		10698	0.2456	10698	0.2456	

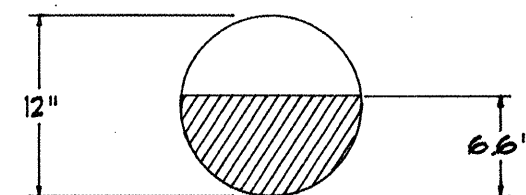
  

VIII. PEAK DISCHARGE 100 YEAR (REF. A, TABLE A-9):						
TREATMENT	TYPES OF	EXISTING		PROPOSED		
TYPE	SURFACES	CFS/AC	Qp(100)	CFS/AC	Qp(100)	
A	UNDEVELOPED	1.56	0.38	1.56	0.00	
B	LANDSCAPING	2.28	0.00	2.28	0.00	
C	COMPACTED/VACANT	3.14	0.00	3.14	0.17	
D	IMPERVIOUS	4.70	0.00	4.70	0.91	
PEAK DISCHARGE FROM BASIN "A"		0.38	CFS		1.07 CFS	

IX. PEAK DISCHARGE 10 YEAR (REF. A, TABLE A-9):						
TREATMENT	TYPES OF	EXISTING		PROPOSED		
TYPE	SURFACES	CFS/AC	Qp(10)	CFS/AC	Qp(10)	
A	UNDEVELOPED	0.38	0.09	0.38	0.00	
B	LANDSCAPING	0.95	0.00	0.95	0.00	
C	COMPACTED/VACANT	1.71	0.00	1.71	0.09	
D	IMPERVIOUS	3.14	0.00	3.14	0.61	
PEAK DISCHARGE FROM BASIN "A"		0.09	CFS		0.70 CFS	

A. 12" CMP STORM DRAIN CAPACITY: Using Manning's Equation  
(Open Channel-uniform flow)



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GIVEN INPUT DATA:
DIAMETER              1.00 FT
SLOPE                  0.010 FT/FT
MANNING'S "n"         0.025
DISCHARGE              1.07 CFS

COMPUTED RESULTS:
DEPTH                  0.55 FT(6.6")
VELOCITY               2.44 FPS
FLOW AREA              0.44 SF
CRITICAL DEPTH         0.44 FT
CRITICAL SLOPE         0.0217 FT/FT
PERCENT FULL           54.3%
FULL CAPACITY          1.85 CFS
QMAX @ 94D             1.99 CFS
FROUDE NUMBER          0.65 (FLOW IS SUBCRITICAL)

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I R.G Lee, Jr, Registered Professional Engineer hereby certify the improvements shown hereon are in substantial compliance with the approved drainage plan.

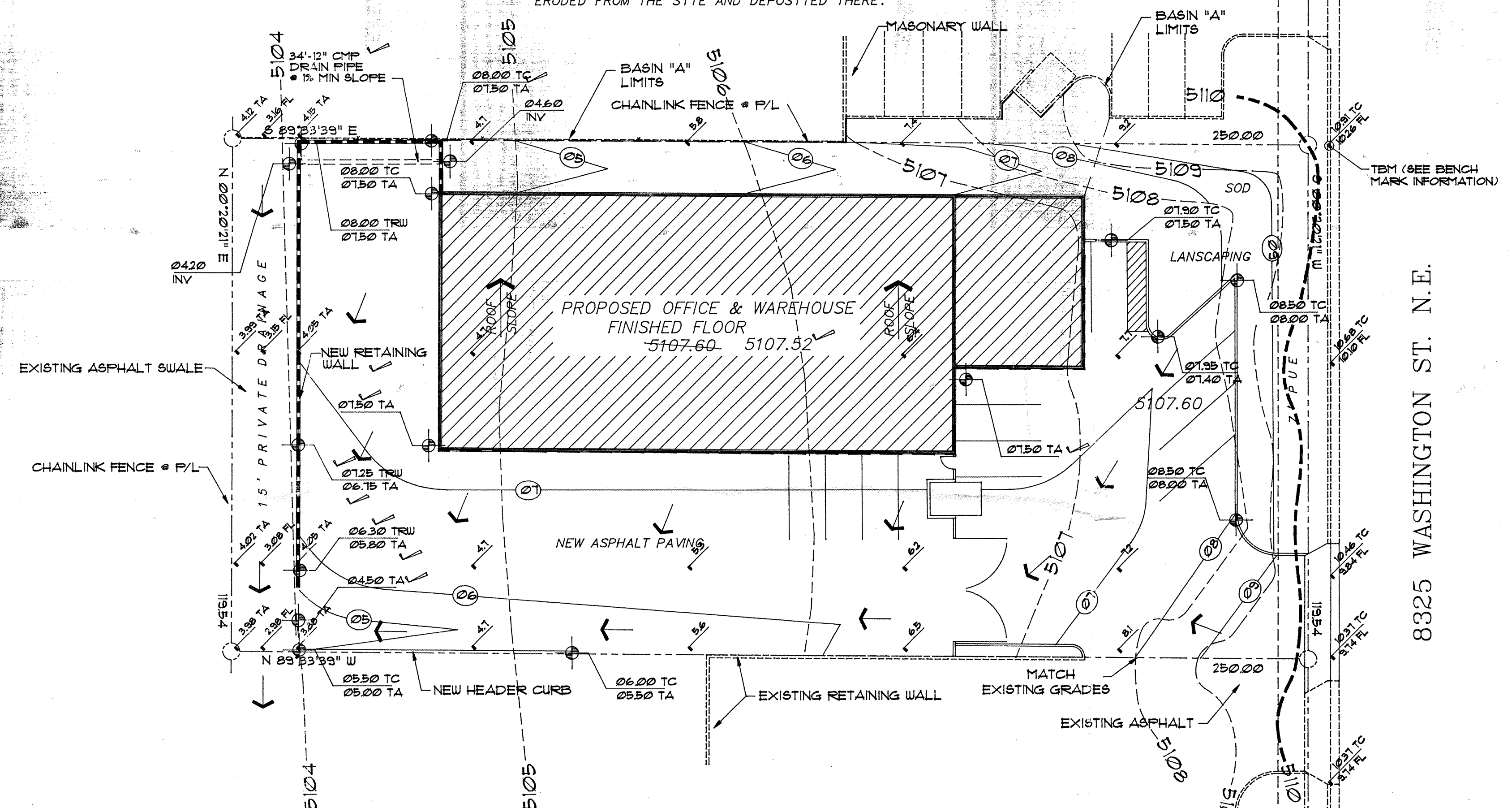
R.G. LEE, JR.

10/30/95  
Date

TEMPORARY BENCH-MARK BEING THE TOP OF CURB  
 SPRAY PAINTED WHITE (■ TBM) BEARS ELEVATION  
 5110.91 MSL, REFERENCE TO CITY BENCH-MARK 8-C17  
 LOCATED NORTH OF PASEO DEL NORTE ON WASHINGTON  
 ST. N.E. BEING A BRASS CAP IN A CURB ON THE WEST  
 SIDE OF THE STREET BEARS ELEVATION 5111.03(MSL).

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUNOFF DURING CONSTRUCTION; HE SHALL INSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

- ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF LEAVING THE SITE AND ENTERING ADJACENT PROPERTY.
- ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SITE. NO SEDIMENT BEING WASHED WATER SHALL BE PERMITTED TO ENTER THE PUBLIC STREETS.
- THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY OR ALL SEDIMENT WITHIN THE PUBLIC STREETS THAT HAVE BEEN ERODED FROM THE SITE AND DEPOSITED THERE.



1. An excavation/construction permit will be required before beginning any work within the City right-of-way. Approved copy of this plan must be submitted at the time of application for permit.
2. All work detailed in this plan to be performed, except as otherwise stated or provided hereon, shall be constructed in accordance with City of Albuquerque Interim Standard Specification for Public Works Construction.
3. Two working days prior to any excavation, contractor must contact line locating Services at (505) 260-1990 for locating existing utilities.
4. Prior to construction, the contractor shall excavate and verify the horizontal and vertical location of all utilities. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
5. Street backfill compaction shall be according to arterial street use.
6. Maintenance of CMP drain pipe shall be the responsibility of the Owner of property served.

A. 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.

TOP OF RETAINING WALL - TRW  
TOP OF CURB - TC  
TOP OF ASPHALT - TA  
FLOWLINE - FL

EXISTING CONTOUR

~~DESIGN CONTOUR~~

DESIGN SPOT ELEVATION

PROPERTY LINE

EASEMENT LINE

FLOW DIRECTION

EXISTING SPOT ELEVATION

NEW RETAINING WALL

DOWN SPOUT

5102

23

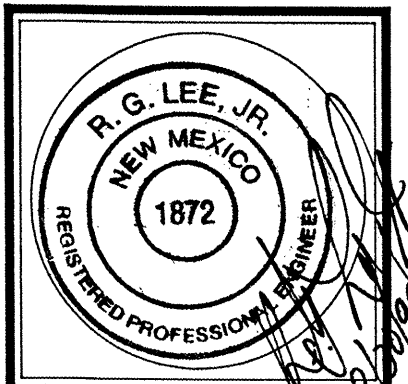
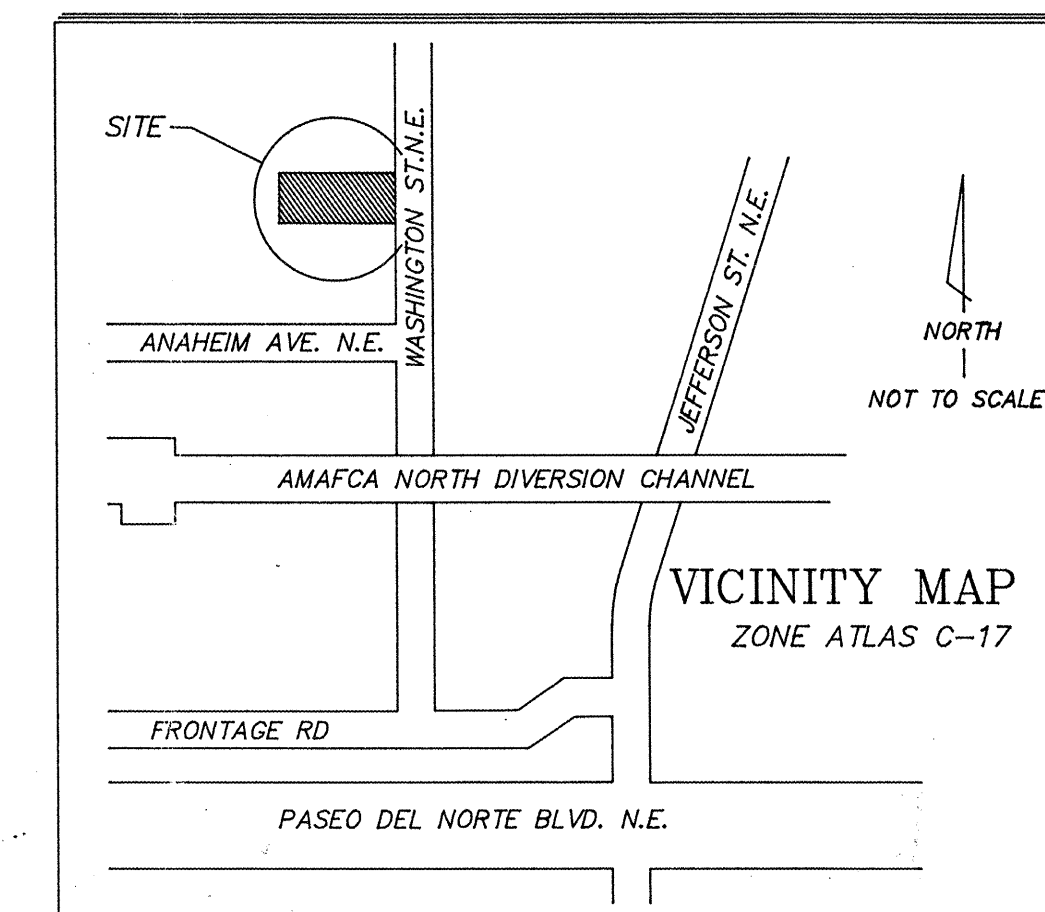
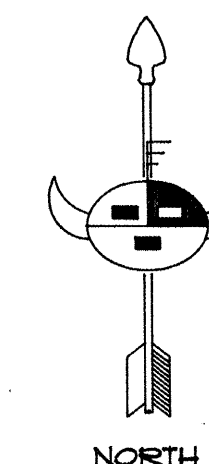
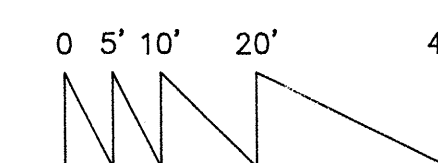
6630 TC

AS-BUILT ELEVATION

14.2

LOT 34A  
CLIFFORD INDUSTRIAL PARK  
ALBUQUERQUE, BERNALILLO COUNTY,  
NEW MEXICO.

SCALE: 1"=20'



Job Number	9571
Date	MARCH 9, 1935
Revised	

Sheet Title	Grading & Drainage Plan
Drawn by HHOOD	Checked by RG LEE/R

**Lee Engineering**

2316 CALLE DE RAFAEL N.E.  
ALBUQUERQUE, N.M. 87122

Job Title

PROPOSED WESTERN METAL WORKS, Inc  
OFFICE & WAREHOUSE FACILITIES  
ALBUQUERQUE, NEW MEXICO

Sheet Number of