

PHASE ONE - TUMBLEWEED

PROJECT TITLE: INDUST L PARKZONE ATLAS/DRIFILE #: L-20-D 13DLEGAL DESCRIPTION: Lots 7 & 8 Tumbleweed Park

CITY ADDRESS: _____

ENGINEERING FIRM: Lovelady & Associates CONTACT: Frank LoveladyADDRESS: 7408 Morrow Ave. NE 87110 PHONE: 883-7973OWNER: Tumbleweed Industrial Park CONTACT: Robert JacobsADDRESS 9915 Trumbull SE 87123 PHONE: 2965520ARCHITECT: Bill Duran CONTACT: Bill DuranADDRESS: _____ PHONE: 299-8968SURVEYOR: Frank Lovelady CONTACT: Frank LoveladyADDRESS: 7408 Morrow Ave. N.E. PHONE: 883-7973

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

____ YES

XX NO____ COPY OF CONFERENCE RECAP
SHEET PROVIDED

DRB NO. _____

EPC NO. _____

PROJECT NO. _____

TYPE OF SUBMITTAL:

____ DRAINAGE REPORT

XX DRAINAGE PLAN

____ CONCEPTUAL GRADING & DRAIN. PLAN

____ GRADING PLAN

____ EROSION CONTROL PLAN

____ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

____ SKETCH PLAT APPROVAL

____ PRELIMINARY PLAT APPROVAL

____ SITE DEVELOPMENT PLAN APPROVAL

____ FINAL PLAT APPROVAL

~~____~~ BUILDING PERMIT APPROVAL

____ FOUNDATION PERMIT APPROVAL

____ CERTIFICATE OF OCCUPANCY APPROVAL

____ ROUGH GRADING PERMIT APPROVAL

____ GRADING/PAVING PERMIT APPROVAL

DATE SUBMITTED: SEPT 3 July 22, 1991BY: Frank D. Lovelady
Frank D. Lovelady, P.E.OTHER LOWERED GRADES (SPECIFY)& ADDED SW CULVERTTO REDUCE AMOUNT OF FILL



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

September 18, 1991

Frank Lovelady
Lovelady & Associates
7408 Morrow, NE
Albuquerque, New Mexico 87110

RE: REVISED DRAINAGE PLAN FOR PHASE ONE, TUMBLEWEED INDUSTRIAL PARK
(L-20/D13D) REVISION DATED SEPTEMBER 3, 1991

Dear Mr. Lovelady:

Based on the information provided on your submittal of September 3, 1991, the above referenced plan is approved for Building Permit.

Please be advised that a separate permit is required for construction within City right-of-way. A copy of this approval letter must be on hand when applying for the excavation permit.

Please attach a copy of this plan to the construction sets prior to sign-off by Hydrology.

If I can be of further assistance, please feel free to call me at 768-2650.

Cordially,

Bernie J. Montoya
Bernie J. Montoya, C.E.
Engineering Assistant

xc: Alan Martinez
Darlene Saavedra

BJM/bsj
(WP+2817)

PUBLIC WORKS DEPARTMENT

DRAINAGE EASEMENT

This DRAINAGE EASEMENT made this 29 day of JAN., 1991, by and between ROBERT G. JACOBS, OWNER(S) of Lot 7, Tumbleweed Park, City of Albuquerque, County of Bernalillo, New Mexico as shown and designated on said plat thereof, filed in the office of the County Clerk of Bernalillo County, New Mexico,

AND

AND
ROBERT Q. JACOBS —; OWNER(S) of Lot 8, Tumbleweed Park,
City of Albuquerque, County of Bernalillo, New Mexico as shown and designated
on said plat thereof, filed in the office of the County Clerk of Bernalillo
County, New Mexico.

The OWNER(S) (which term includes successors and assigns) of said Lot 8 grant to the OWNER(S) of said Lot 7, the right to convey storm water runoff, any excess water resulting from irrigation of landscaping, or any excess water from any other ordinary light-commercial use, across the boundary line separating the two lots and across said Lot 8 as may be required to discharge said waters to Bell Avenue, S.E.

This DRAINAGE EASEMENT is binding upon the OWNER(S) of said Lot 8, his heirs and assigns and will continue to run with said property until an alternative drainage plan has been approved by the City of Albuquerque allowing the release of this document.

OWNER(S) of Lot 8, Tumbleweed Park.

(Signature)

ACKNOWLEDGEMENTS

STATE OF NEW MEXICO)) ss
BERNALILLO COUNTY)

The foregoing instrument was acknowledged before me this 29th day of January, 1992, by Robert Jacobs, OWNER(S) of said Lot 8, Tumbleweed Park.

Norma J. Casarez
(Notary Public)

Commission Expires:



OFFICIAL SEAL
NORMA J. CAMERY
NOTARY PUBLIC - NEW MEXICO
Notary Bond Filed with Secretary of State
My Commission Expires 6-27-94

DRAINAGE EASEMENT

This DRAINAGE EASEMENT made this _____ day of _____, 1991, by and between

_____, OWNER(S) of Lot 7, Tumbleweed Park, City of Albuquerque, County of Bernalillo, New Mexico as shown and designated on said plat thereof, filed in the office of the County Clerk of Bernalillo County, New Mexico,

AND

_____, OWNER(S) of Lot 8, Tumbleweed Park, City of Albuquerque, County of Bernalillo, New Mexico as shown and designated on said plat thereof, filed in the office of the County Clerk of Bernalillo County, New Mexico.

The OWNER(S) (which term includes successors and assigns) of said Lot 8 grant to the OWNER(S) of said Lot 7, the right to convey storm water runoff, any excess water resulting from irrigation of landscaping, or any excess water from any other ordinary light-commercial use, across the boundary line separating the two lots and across said Lot 8 as may be required to discharge said waters to Bell Avenue, S.E.

This DRAINAGE EASEMENT is binding upon the OWNER(S) of said Lot 8, his heirs and assigns and will continue to run with said property until an alternative drainage plan has been approved by the City of Albuquerque allowing the release of this document.

OWNER(S) of Lot 8, Tumbleweed Park.

(Signature)

ACKNOWLEDGEMENTS

STATE OF NEW MEXICO)) ss
BERNALILLO COUNTY)

The foregoing instrument was acknowledged before me this _____ day of _____, 1991, by _____, OWNER(S) of said Lot 8, Tumbleweed Park.

(Notary Public)

My Commission Expires: _____

mission Expires: _____

Owner is getting this signed,
Notarized & Recorded. He
will get you a copy

LEGEND:

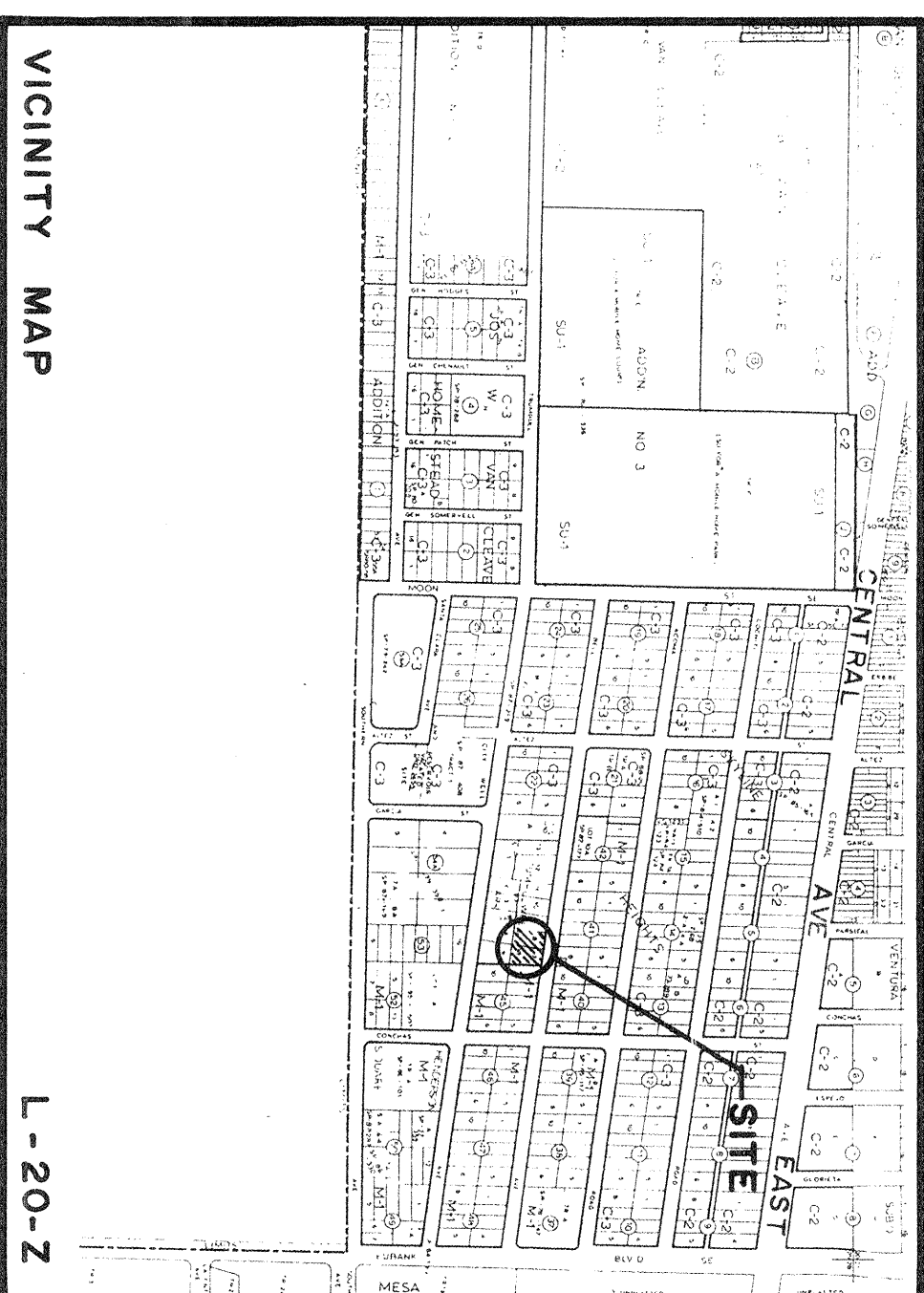
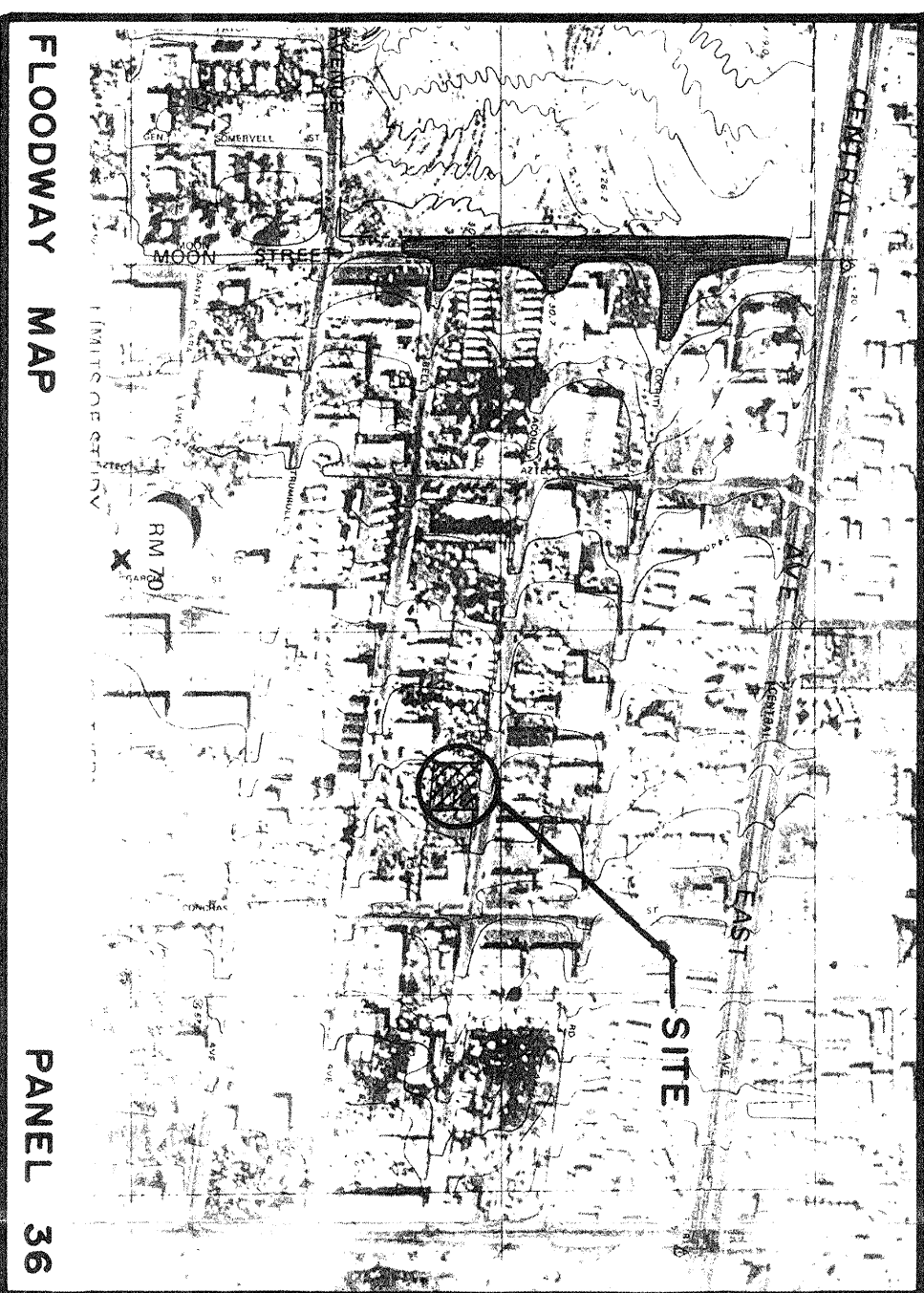
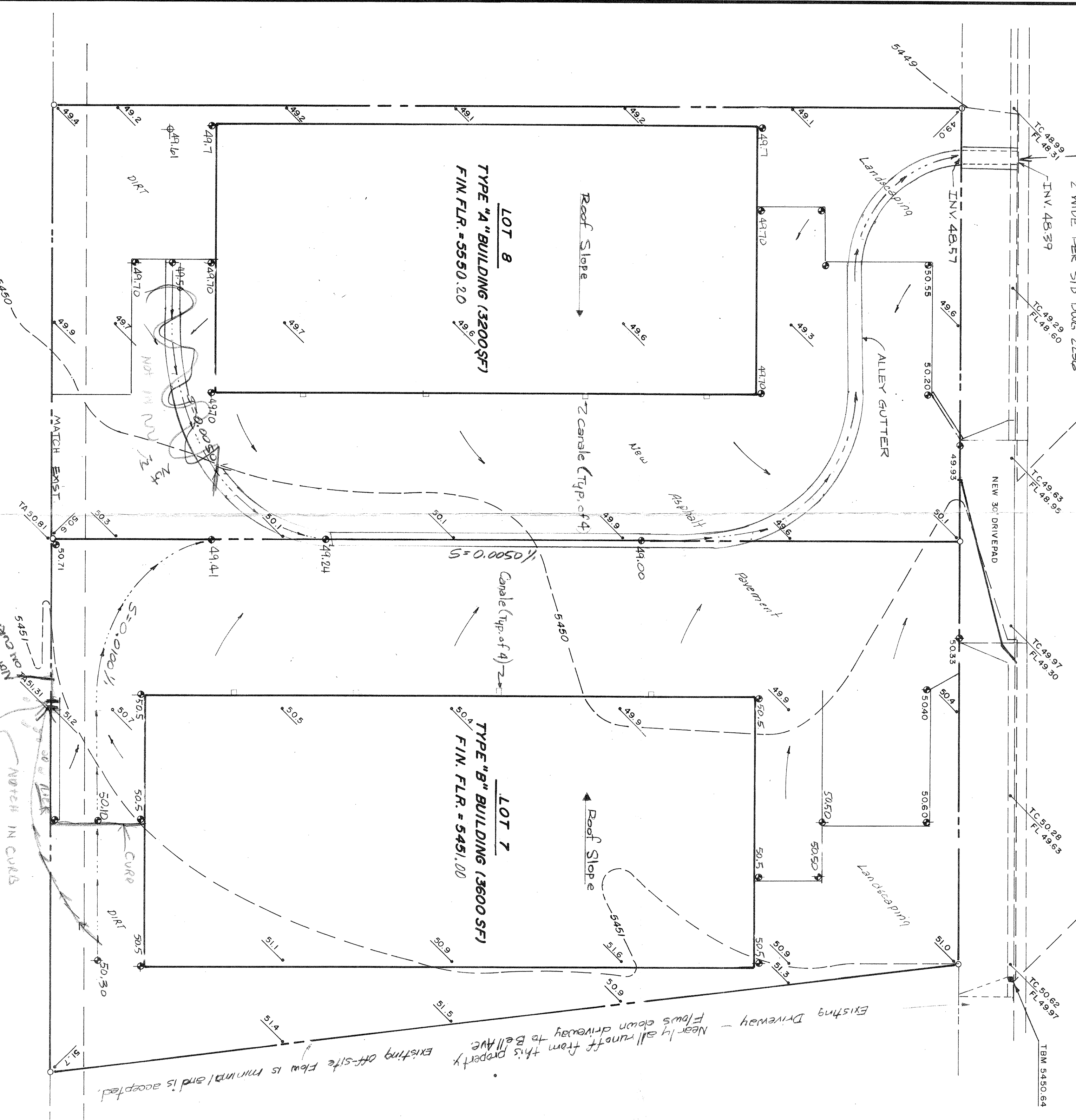
EXISTING	NEW	DESCRIPTION
---	---	CONTOUR
---	---	SPOT ELEVATION
---	---	SMALL
---	---	SHEET FLOW
---	---	PROPERTY LINE
---	---	TOP OF ASPHALT
---	---	TOP OF CURB
---	---	FLOW LINE

BELL

AVENUE

S.E.

SCALE 1" = 50'



EXISTING CONDITIONS:

The site is located on Bell Avenue SE which is paved and has standard curb and gutter. The site is smoothly graded with a slight east-to-west slope. The property east of the site has a mobile home, the driveway for which is a gravel driveway. The site is currently vacant and is a commercial warehouse facility which is completely covered with building or pavement, the only exception being the narrow spaces between the buildings and the east and west property lines. All runoff is directed to Tumball Avenue SE in accordance with the approved drainage plan. Property west of the site is undeveloped and drains toward the west. There is a flood zone downstream from the site on Wyoming Boulevard SE. However, there is a storm drainage system extending up Bell Avenue with inlets approximately 170' west of the site. This system should intercept all site runoff before it reaches the flood zone.

PROPOSED CONDITIONS:

It is proposed to develop the site as a warehouse and storage facility. Runoff will be directed to Bell Avenue. The site is an inlet site, the increase in runoff resulting from development is minimal, and the presence of existing storm inlets 170' west of the site, all of these factors support unrestricted discharge for this site.

SOIL INFORMATION:

(Refer to "Soil Survey of Bernalillo County", June 1972.) Soil is Fair, fine-grained gravelly fine sandy loam, 0 to 5 percent slopes, Hydrologic Soil Group "B".

TIME OF CONCENTRATION:

Use ten (10) minutes, minimum time of concentration.

RAINFALL, 100-YEAR, 6-HOUR:

(Refer to D.P.M., Plate 22.2 D-1), $R_0 = 2.4$ inches.

RAINFALL INTENSITY:

$I = R_0 \times 6.84 \times T^{-0.51} = 5.07$ inches per hour.

**CITY OF ALBUQUERQUE
DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY
NOTICE TO CONTRACTOR**

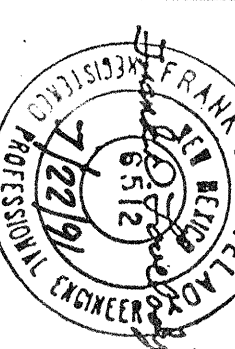
1. An excavation/construction permit will be required before beginning any work within City right-of-way. An approved copy of these plans must be submitted at the time of application for this permit.
2. All work detailed on these plans to be performed under contract, except as otherwise stated or provided hereon, shall be constructed in accordance with Standard Specifications for Public Works Construction, 1986.
3. Two (2) working days prior to any excavation, contractor must contact New Mexico One Call System, Inc. (260-1990), for location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the horizontal and vertical locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer or surveyor so that the conflict can be resolved with a minimum amount of delay.
5. Backfill compaction shall be according to RESIDENTIAL street use.
6. Maintenance of these facilities shall be the responsibility of the owner of the property served.
7. The address of the property served is 9912 BELL SE

APPROVALS:
HYDROLOGY Ramon Montoya 9/14/91 (Date)

INSPECTOR (Name) (Date)

CONSTRUCTION (Name) (Date)

REVISED 9/3/91



EROSION CONTROL NOTES:
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. adjacent property, rights-of-way and easements shall be protected from flooding from runoff from the site.
2. Should the contractor fail to prevent sediment-bearing water from entering public right-of-way or adjacent private property, he shall promptly remove all sediment originating from the site.
3. Control of sediment-bearing waters will be accomplished by use of a silt fence and/or silt fence and/or silt fence. The berm shall be located along the downstream perimeter of the property.

TEMPORARY BENCH MARK (TBM):
A 2" square and letters "TBM" painted with black paint on top of curb at the northeast corner of the property. Elevation = 5450.64

BENCH MARK:
"SISAM", Station is located 6.5 mi S, 0.48 mi E of Albuquerque, inside of the fenced area of the City-owned "SISAM" Park is a Standard U.S.C&G.S. brass tablet stamped "S 1000 0.00 1000 0.00" on top of a concrete post flush with the ground. Elevation = 5444.49 feet.

LEGAL DESCRIPTION:
Lot numbered seven (7) and lot numbered eight (8), Tumbweed Park.

PEAK DISCHARGE:
Existing:
 $Q_{100} = CVA = 0.40 \times 5.07 (18014 / 43560) = 0.84$ CFS.
 $Q_{10} = 0.657 \times 0.84 = 0.55$ CFS
Developed:
 $Q_{100} = CIA = 0.77 \times 5.07 \times 0.4135 = 1.61$ CFS
 $Q_{10} = 0.657 \times 1.61 = 1.06$ CFS

VOLUMES, 100-YEAR, 6-HOUR:
Existing:
 $V_{100} = 18014 (0.90 / 12) = 1351$ CF.
 $V_{10} = 0.657 \times 1351 = 888$ CF
Developed:
 $V_{100} = (2.2 (6800 + 6396) + 0.21 \times 1604 + 0.95 \times 3214) = 2701$ CF
 $V_{10} = 0.657 \times 2701 = 1775$ CF

WEIGHTED "C" VALUE:
Existing: $C = 0.40$
Developed:
 $C_w = (6800 \times 0.90 + 6396 \times 0.95 + 1604 \times 0.25 + 3214 \times 0.40) = 0.77$

GRAVITY DISCHARGE:
Existing:
 $Q_{100} = CIA = 0.40 \times 5.07 (18014 / 43560) = 0.84$ CFS.
 $Q_{10} = 0.657 \times 0.84 = 0.55$ CFS
Developed:
 $Q_{100} = CIA = 0.77 \times 5.07 \times 0.4135 = 1.61$ CFS
 $Q_{10} = 0.657 \times 1.61 = 1.06$ CFS

VOLUMES, 100-YEAR, 6-HOUR:
Existing:
 $V_{100} = 18014 (0.90 / 12) = 1351$ CF.
 $V_{10} = 0.657 \times 1351 = 888$ CF
Developed:
 $V_{100} = (2.2 (6800 + 6396) + 0.21 \times 1604 + 0.95 \times 3214) = 2701$ CF
 $V_{10} = 0.657 \times 2701 = 1775$ CF

GRAVITY DISCHARGE:
Existing:
 $Q_{100} = CIA = 0.40 \times 5.07 (18014 / 43560) = 0.84$ CFS.
 $Q_{10} = 0.657 \times 0.84 = 0.55$ CFS
Developed:
 $Q_{100} = CIA = 0.77 \times 5.07 \times 0.4135 = 1.61$ CFS
 $Q_{10} = 0.657 \times 1.61 = 1.06$ CFS

VOLUMES, 100-YEAR, 6-HOUR:
Existing:
 $V_{100} = 18014 (0.90 / 12) = 1351$ CF.
 $V_{10} = 0.657 \times 1351 = 888$ CF
Developed:
 $V_{100} = (2.2 (6800 + 6396) + 0.21 \times 1604 + 0.95 \times 3214) = 2701$ CF
 $V_{10} = 0.657 \times 2701 = 1775$ CF

WEIGHTED "C" VALUE:
Existing: $C = 0.40$
Developed:
 $C_w = (6800 \times 0.90 + 6396 \times 0.95 + 1604 \times 0.25 + 3214 \times 0.40) = 0.77$

GRAVITY DISCHARGE:
Existing:
 $Q_{100} = CIA = 0.40 \times 5.07 (18014 / 43560) = 0.84$ CFS.
 $Q_{10} = 0.657 \times 0.84 = 0.55$ CFS
Developed:
 $Q_{100} = CIA = 0.77 \times 5.07 \times 0.4135 = 1.61$ CFS
 $Q_{10} = 0.657 \times 1.61 = 1.06$ CFS

VOLUMES, 100-YEAR, 6-HOUR:
Existing:
 $V_{100} = 18014 (0.90 / 12) = 1351$ CF.
 $V_{10} = 0.657 \times 1351 = 888$ CF
Developed:
 $V_{100} = (2.2 (6800 + 6396) + 0.21 \times 1604 + 0.95 \times 3214) = 2701$ CF
 $V_{10} = 0.657 \times 2701 = 1775$ CF

WEIGHTED "C" VALUE:
Existing: $C = 0.40$
Developed:
 $C_w = (6800 \times 0.90 + 6396 \times 0.95 + 1604 \times 0.25 + 3214 \times 0.40) = 0.77$

GRAVITY DISCHARGE:
Existing:
 $Q_{100} = CIA = 0.40 \times 5.07 (18014 / 43560) = 0.84$ CFS.
 $Q_{10} = 0.657 \times 0.84 = 0.55$ CFS
Developed:
 $Q_{100} = CIA = 0.77 \times 5.07 \times 0.4135 = 1.61$ CFS
 $Q_{10} = 0.657 \times 1.61 = 1.06$ CFS

VOLUMES, 100-YEAR, 6-HOUR:
Existing:
 $V_{100} = 18014 (0.90 / 12) = 1351$ CF.
 $V_{10} = 0.657 \times 1351 = 888$ CF
Developed:
 $V_{100} = (2.2 (6800 + 6396) + 0.21 \times 1604 + 0.95 \times 3214) = 2701$ CF
 $V_{10} = 0.657 \times 2701 = 1775$ CF

WEIGHTED "C" VALUE:
Existing: $C = 0.40$
Developed:
 $C_w = (6800 \times 0.90 + 6396 \times 0.95 + 1604 \times 0.25 + 3214 \times 0.40) = 0.77$

GRAVITY DISCHARGE:
Existing:
 $Q_{100} = CIA = 0.40 \times 5.07 (18014 / 43560) = 0.84$ CFS.
 $Q_{10} = 0.657 \times 0.84 = 0.55$ CFS
Developed:
 $Q_{100} = CIA = 0.77 \times 5.07 \times 0.4135 = 1.61$ CFS
 $Q_{10} = 0.657 \times 1.61 = 1.06$ CFS

VOLUMES, 100-YEAR, 6-HOUR:
Existing:
 $V_{100} = 18014 (0.90 / 12) = 1351$ CF.
 $V_{10} = 0.657 \times 1351 = 888$ CF
Developed:
 $V_{100} = (2.2 (6800 + 6396) + 0.21 \times 1604 + 0.95 \times 3214) = 2701$ CF
 $V_{10} = 0.657 \times 2701 = 1775$ CF

WEIGHTED "C" VALUE:
Existing: $C = 0.40$
Developed:
 $C_w = (6800 \times 0.90 + 6396 \times 0.95 + 1604 \times 0.25 + 3214 \times 0.40) = 0.77$

SEP 3 1991

**GRADING & DRAINAGE PLAN
PHASE ONE
TUMBLEWEED INDUSTRIAL PARK**

ALBUQUERQUE, NEW MEXICO