HY-DROLOGY

D17/D30
2 PLANS

D17/D30

2 PLANS

ADDRESS:
4701 HAWKINS STREET N.E.

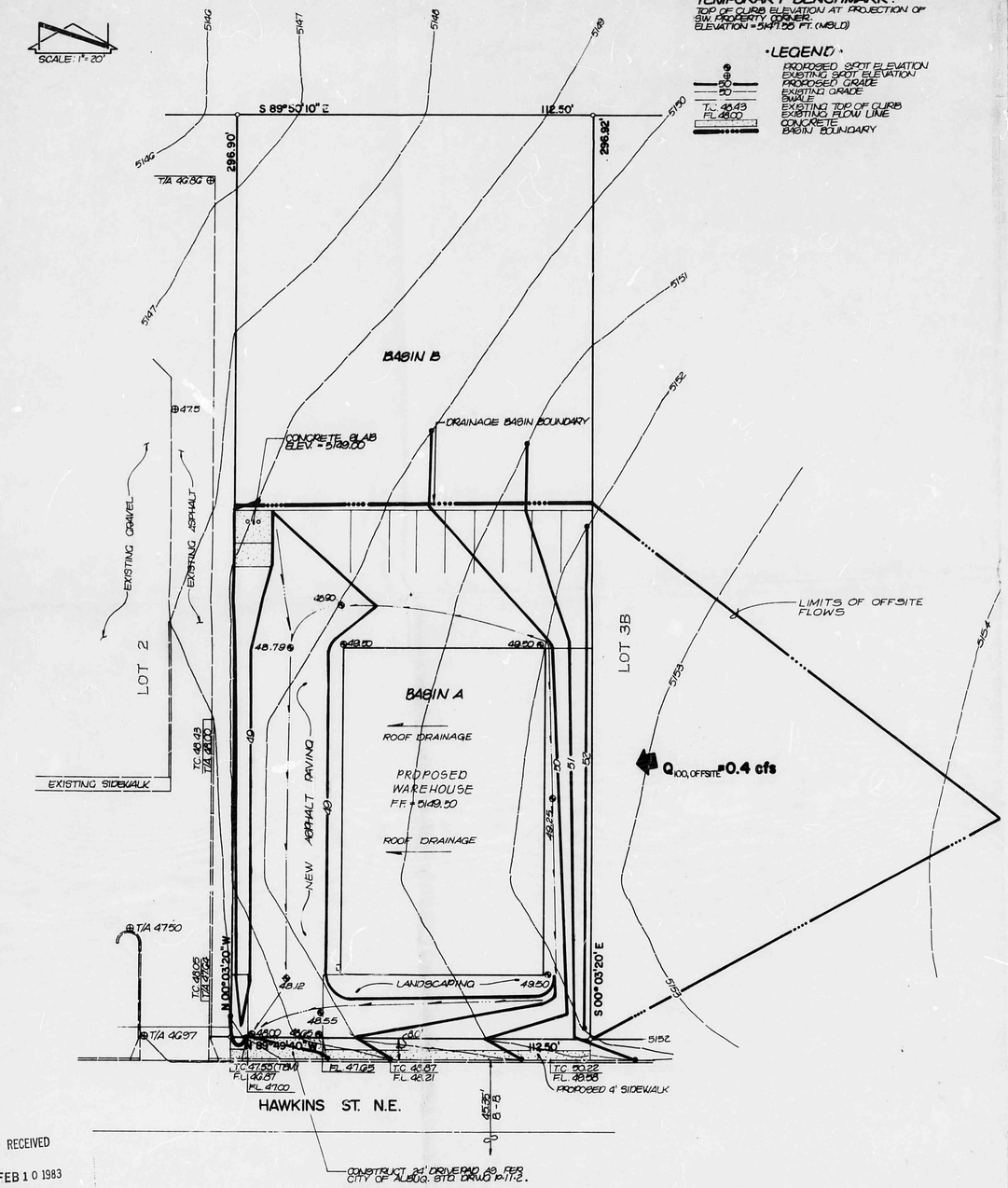
LEGAL DESCRIPTION:
LOT 3-A, UNIT 5, INTERSTATE INDUSTRIAL TRACT
BOOK 85-10, PAGE 78

PROJECT BENCHMARK:
ACS BRASS TABLET, STAMPED "8-D14" LOCATED 300 FT. SOUTH OF ELLISON N.E. AND 45' WEST OF THE CENTERLINE OF JEFFERSON ST. N.E.
ELEVATION = 5148.35 FT. (MSLD)

TEMPORARY BENCHMARK:
TOP OF CURB ELEVATION AT PROJECTION OF SW. PROPERTY CORNER.
ELEVATION = 5147.95 FT. (MSLD)

·LEGEND·

- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- 50 PROPOSED GRADE
- 50 EXISTING GRADE
- SWALE
- T.C. 49.43 FL. 48.00 EXISTING TOP OF CURB / EXISTING FLOW LINE
- CONCRETE
- BASIN BOUNDARY



RECEIVED
FEB 10 1983
ENGINEERING

DRAINAGE PLAN

The following items concerning the Sonnenburg Warehouse Grading and Drainage Plan are contained hereon:

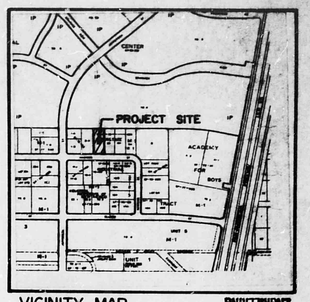
1. Vicinity Map
2. Grading Plan
3. Calculations

The proposed improvements, as shown by the Vicinity Map, are located along the north side of Hawkins Street N.E., west of Jefferson Street N.E. The site is more particularly described as Lot 3-A, Unit 5, Interstate Industrial Tract. The site is presently undeveloped.

The site does not lie within a designated Flood Hazard Zone as indicated by Plate D-17 of the Albuquerque Master Drainage Study. Runoff from the site will be freely discharged into Hawkins Street via the drivepad because it has been determined by the City that downstream capacity exists.

The Grading Plan shows: 1) existing and proposed grades indicated by spot elevations and contours at 1'-0" intervals 2) continuity between proposed and existing grades and 3) the limit and character of proposed improvements. Also shown on this plan is the limit of ponding on the parking lot.

The calculations which appear below analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The Rational Method has been used for this analysis in accordance with the City of Albuquerque Development Process Manual, Volume II. No development occurs in Basin B, therefore, calculations have not been provided for this basin. In addition, no runoff from Basin B will enter Basin A.



VICINITY MAP
SCALE: 1" = 800'

RECEIVED
FEB 10 1983
ENGINEERING

CALCULATIONS

Rational Method

1. DISCHARGE: $Q = CiA$

   C = Rational Coefficient from DPM Plate 22.2C-1

   $i = P_6(6.84)T_c^{-0.51}$

   where P_6 = rainfall = 2.2 inches (NOAA Atlas)

   T_c = time of concentration = $0.00013L^{0.77}S^{-03.85}$

   A = Area of Basin

2. VOLUME: $V = CP_6A$

EXISTING CONDITION

1. Area of site = 33,400 sf = 0.77 Ac
   % impervious = 0
   C = 0.34
   T_c = 10 min. (minimum)
   i = 4.65 in/hr
   Q_{100} = 1.2 cfs
   V_{100} = 2080 cf

DEVELOPED CONDITIONS

Basin A:

Area of basin = 19,180 sf = 0.44 Ac
Impervious Area = 15,725 sf
% impervious = 82
C = 0.78
t_c = 10 min (minimum)
i = 4.65 in/hr
Q_{100} = 1.6 cfs
V_{100} = 2740 cf

OFFSITE FLOW

AREA = 10,990 sf
C = 0.34
i = 4.65 in/hr.
Q = 0.40 c.f.s.

RECEIVED
FEB 10 1983
ENGINEERING

1/21/83
2/7/83

DON NORRIS ASSOCIATES, INC. ENGINEERS, 811 DALLAS, N.E. · ALBUQUERQUE · NEW MEXICO · 87110	NO.	DATE	BY	REVISIONS	DESIGNED BY: J.Q.M./G.K.B.	JOB NO. 2-1321
	1	2/83	GKB	DELETE PONDING, CHANGE TO FREE DISCHARGE	DRAWN BY: CQC.	DATE 1/83
					APPROVED: TTM.	

GRADING & DRAINAGE PLAN

SONNENBURG WAREHOUSE

FILE NO.

SHEET 1 OF 1

ADDRESS:
4701 HAWKINS STREET N.E.

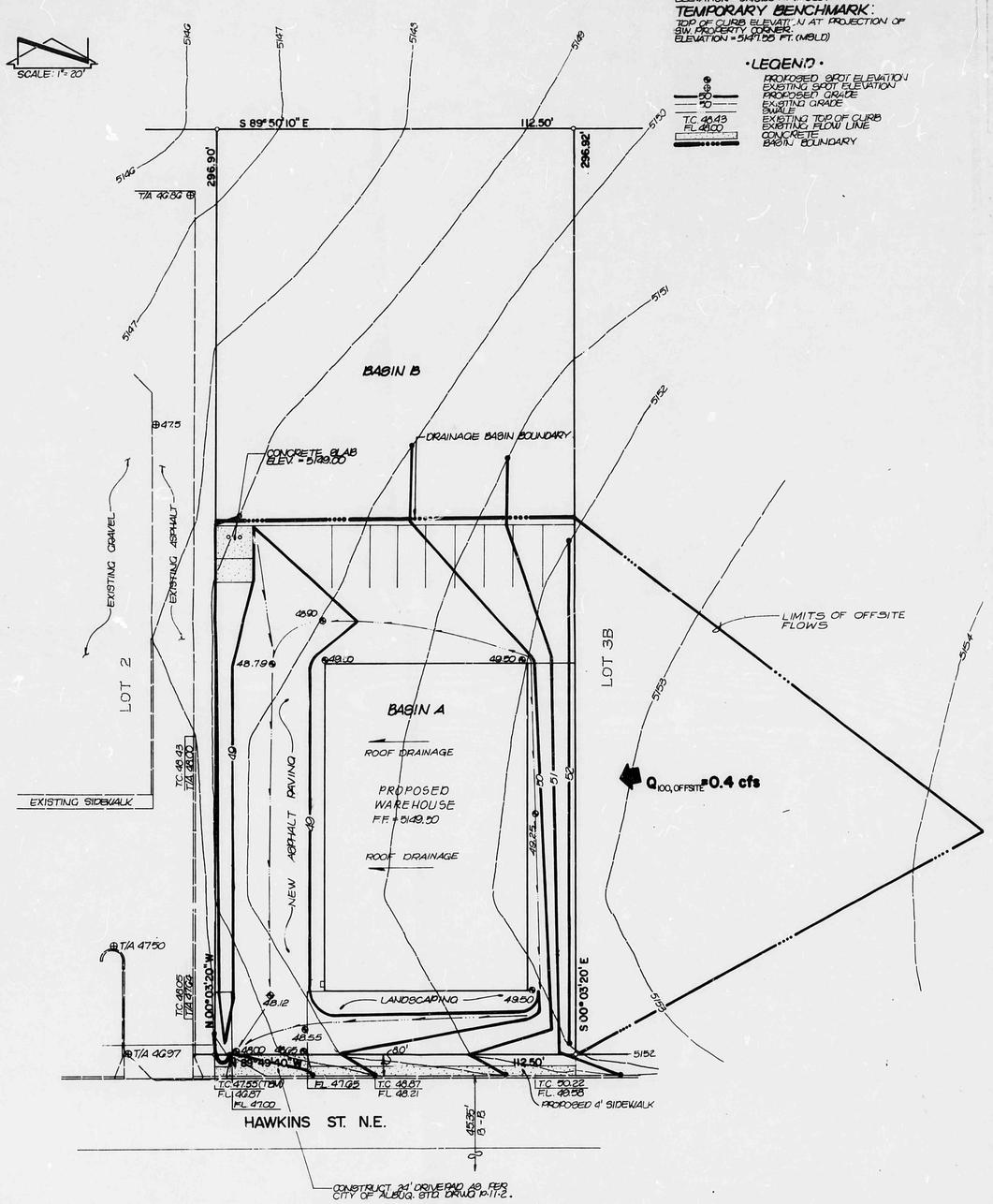
LEGAL DESCRIPTION:
LOT 3-A UNIT 5 INTERSTATE INDUSTRIAL TRACT
BLK 8-18, PAGE 76

PROJECT BENCHMARK:
ACS. BRASS TABLET, STAMPED 8-017A' LOCATED 300 FT. SOUTH OF ELLISON N.E. AND 49' WEST OF THE CENTERLINE OF JEFFERSON ST. N.E.
ELEVATION = 5486.05 FT. (MSLD)

TEMPORARY BENCHMARK:
TOP OF CURB ELEVATION AT PROJECTION OF SW PROPERTY CORNER.
ELEVATION = 5471.55 FT. (MSLD)

·LEGEND·

- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- PROPOSED GRADE
- EXISTING GRADE
- SWALE
- T.C. 45.43 — EXISTING TOP OF CURB
- FL 45.00 — EXISTING FLOW LINE
- CONCRETE
- BASIN BOUNDARY



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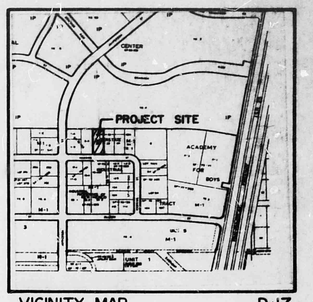

VICINITY MAP D-17
SCALE: 1" = 800'

CALCULATIONS

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1/21/83
2/9/83

NO.	DATE	BY	REVISIONS
1	2/83	GKS	DELETE PONDING, CHANGE TO FREE DISCHARGE

Tom Mann Associates, Inc.
811 DALLAS, N.E. · ALBUQUERQUE · NEW MEXICO · 87110
ENGINEERS

DESIGNED BY: J.G.M./GKS.
DRAWN BY: C.G.C.
APPROVED: T.T.M.
JOB NO. 2-1321
DATE 1/83

GRADING & DRAINAGE PLAN
SONNENBURG WAREHOUSE

FILE NO.
SHEET 1 OF 1