HYDROLOGY N16/D4 3 PLANS

N16/D4

3 Plans

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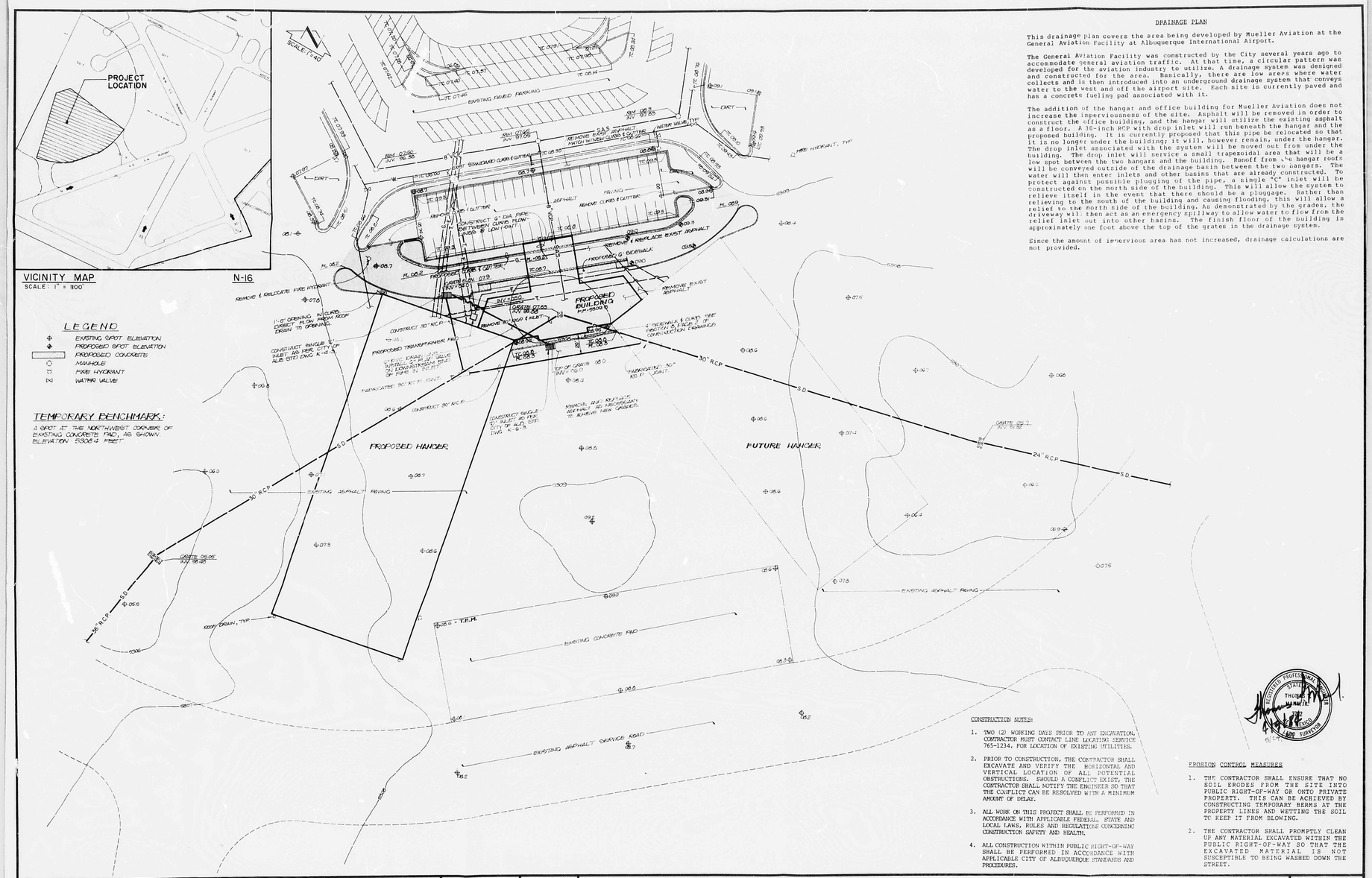


## DRAINAGE PLAN

This drainage plan covers the area being developed by Mueller Aviation at the General Aviation Facility at Albuquerque International Airport.

The General Aviation Facility was constructed by the City several years ago to accommodate general aviation traffic. At that time, a circular pattern was developed for the aviation industry to utilize. A drainage system was designed and constructed for the area. Basically, there are low areas where water collects and is then introduced into an underground drainage system that conveys water to the west and off the airport site. Each site is currently paved and has a concrete fueling pad associated with it.

The addition of the hangar and office building for Mueller Aviation does not increase the imperviousness of the site. Asphalt will be removed in order to construct the office building, and the hangar will utilize the existing asphalt as a floor. A 36-inch RCP with drop inlet will run beneath the hangar and the proposed building. It is currently proposed that this pipe be relocated so that it is no longer under the building; it will, however remain, under the hangar. The drop inlet associated with the system will be moved out from under the building. The drop inlet will service a small trapezoidal area that will be a low spot between the two hangars and the building. Runoff from the hangar roofs will be conveyed outside of the drainage basin between the two hangars. The water will then enter inlets and other basins that are already constructed. To protect against possible plugging of the pipe, a single "C" inlet will be constructed on the north side of the building. This will allow the system to relieve itself in the event that there should be a pluggage. Rather than relieving to the south of the building and causing flooding, this will allow a relief to the north side of the building. As demonstrated by the grades, the driveway will then act as an emergency spillway to allow water to flow from the relief inlet out into other basins. The finish floor of the building is approximately one foot above the top of the grates in the drainage system.

Since the amount of impervious area has not increased, drainage calculations are not provided.

CONSTRUCTION NOTES:

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 765-1234, FOR LOCATION OF EXISTING UTILITIES.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
3. 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.
4. ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.

EROSION CONTROL MEASURES

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AT THE PROPERTY LINES AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
2. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.

BOHANNAN-HUSTON INC.
8111 DALLAS N.E. · ALBUQUERQUE · NEW MEXICO · 87110
ENGINEERS

| NO. | DATE | BY | REVISIONS |
|---|---|---|---|
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DESIGNED BY J.G.M.
DRAWN BY L.B.D.
APPROVED T.T.M.

JOB NO. 40341
DATE 3-84

GRADING AND DRAINAGE PLAN
MUELLER AVIATION

FILE NO.
SHEET 1 OF 1

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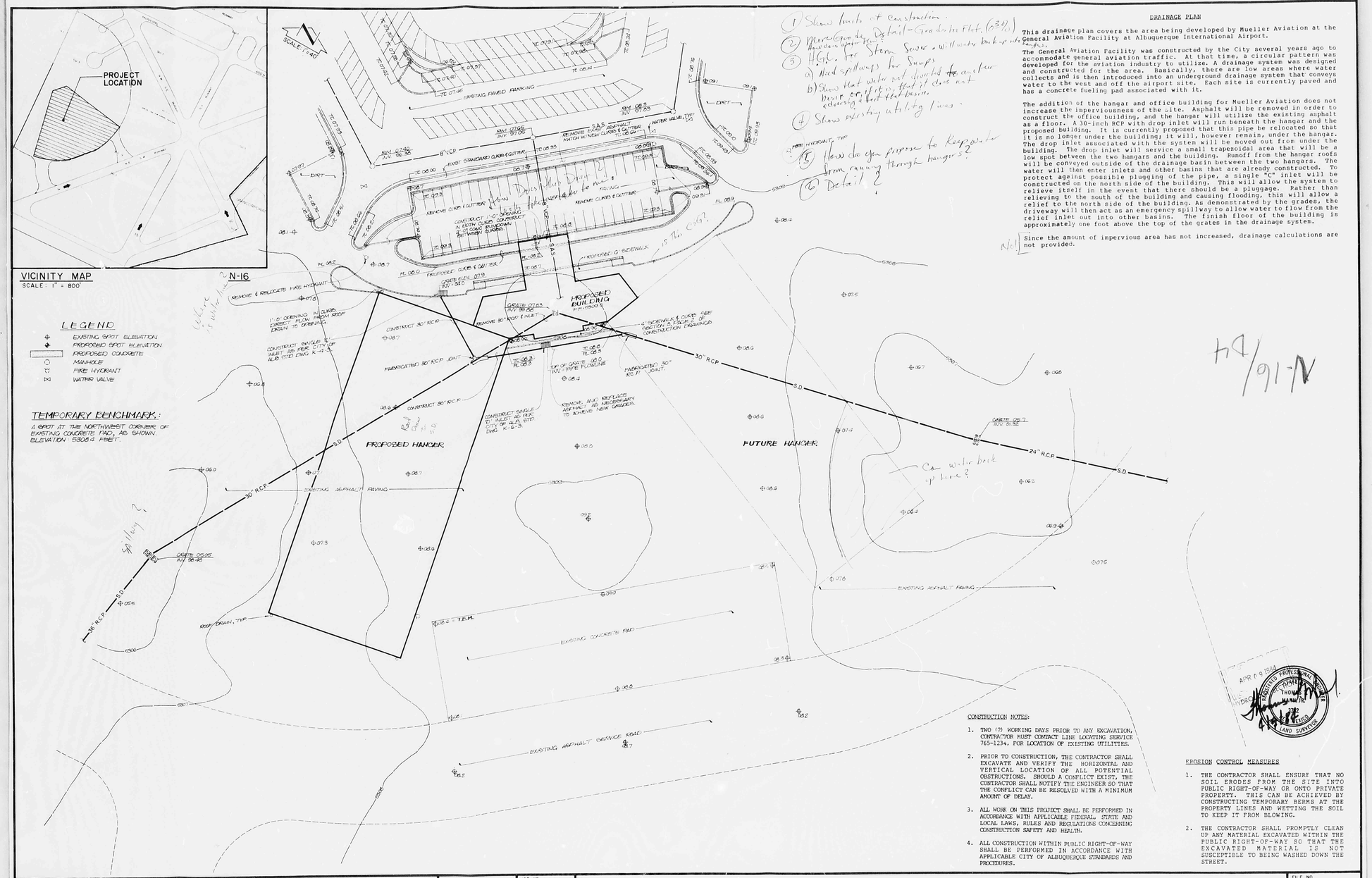


VICINITY MAP
SCALE: 1" = 800'

N-16

LEGEND

- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- PROPOSED CONCRETE
- MANHOLE
- FIRE HYDRANT
- WATER VALVE

TEMPORARY BENCHMARK:

A SPOT AT THE NORTHWEST CORNER OF EXISTING CONCRETE PAD, AS SHOWN, ELEVATION 5306.4 FEET.

1) Show limits of construction.
2) Move Grade to Drainage Detail - Grade to Flat (0.3%)
3) HGL for Storm Sewer. Will water back up into hangars.
a) Need spillway for Swales
b) Show that water not directed to neighbor. Prior approval in writing that it does not adversely affect that basin.
4) Show existing utility lines.
5) How do you propose to keep water from running through hangers?
6) Detail?

Can water back up here?

Spillway?

N-16 Pg

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The addition of the hangar and office building for Mueller Aviation does not increase the imperviousness of the site. Asphalt will be removed in order to construct the office building, and the hangar will utilize the existing asphalt as a floor. A 30-inch RCP with drop inlet will run beneath the hangar and the proposed building. It is currently proposed that this pipe be relocated so that it is no longer under the building; it will, however remain, under the hangar. The drop inlet associated with the system will be moved out from under the building. The drop inlet will service a small trapezoidal area that will be a low spot between the two hangars and the building. Runoff from the hangar roofs will be conveyed outside of the drainage basin between the two hangars. The water will then enter inlets and other basins that are already constructed. To protect against possible plugging of the pipe, a single "C" inlet will be constructed on the north side of the building. This will allow the system to relieve itself in the event that there should be a pluggage. Rather than relieving to the south of the building and causing flooding, this will allow a relief to the north side of the building. As demonstrated by the grades, the driveway will then act as an emergency spillway to allow water to flow from the relief inlet out into other basins. The finish floor of the building is approximately one foot above the top of the grates in the drainage system.

Since the amount of impervious area has not increased, drainage calculations are not provided.

CONSTRUCTION NOTES:

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APR 09 1984

REGISTERED PROFESSIONAL ENGINEER THOMAS T. MOORE 7112 NEW MEXICO LAND SURVEYOR

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| CONTINENTAL ENGINEERING CO. 811 DALLAS N.E. - ALBUQUERQUE - NEW MEXICO - 87110 ENGINEERS | NO. / DATE / BY / REVISIONS | DESIGNED BY J.G.M. DRAWN BY L.B.D. APPROVED T.T.M. | JOB NO. 40341 DATE 3-84 | GRADING AND DRAINAGE PLAN MUELLER AVIATION | FILE NO. SHEET 1 OF 1 | |

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CITY OF ALBUQUERQUE

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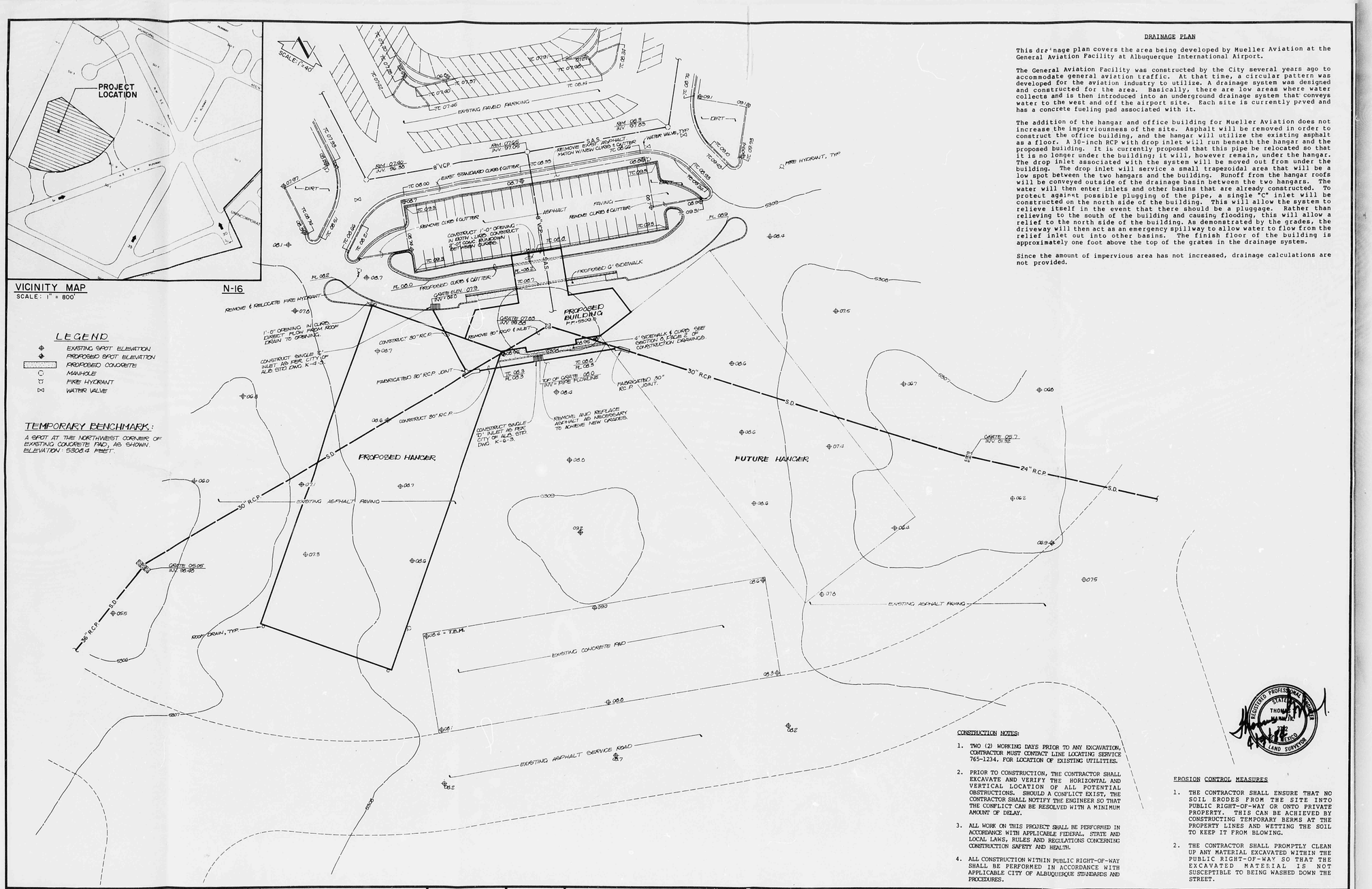
VICINITY MAP
SCALE: 1" = 800'

N-16

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REGISTERED PROFESSIONAL ENGINEER — STATE OF NEW MEXICO — THOMAS M. HAYNIE — 4-4-84 — LAND SURVEYOR

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