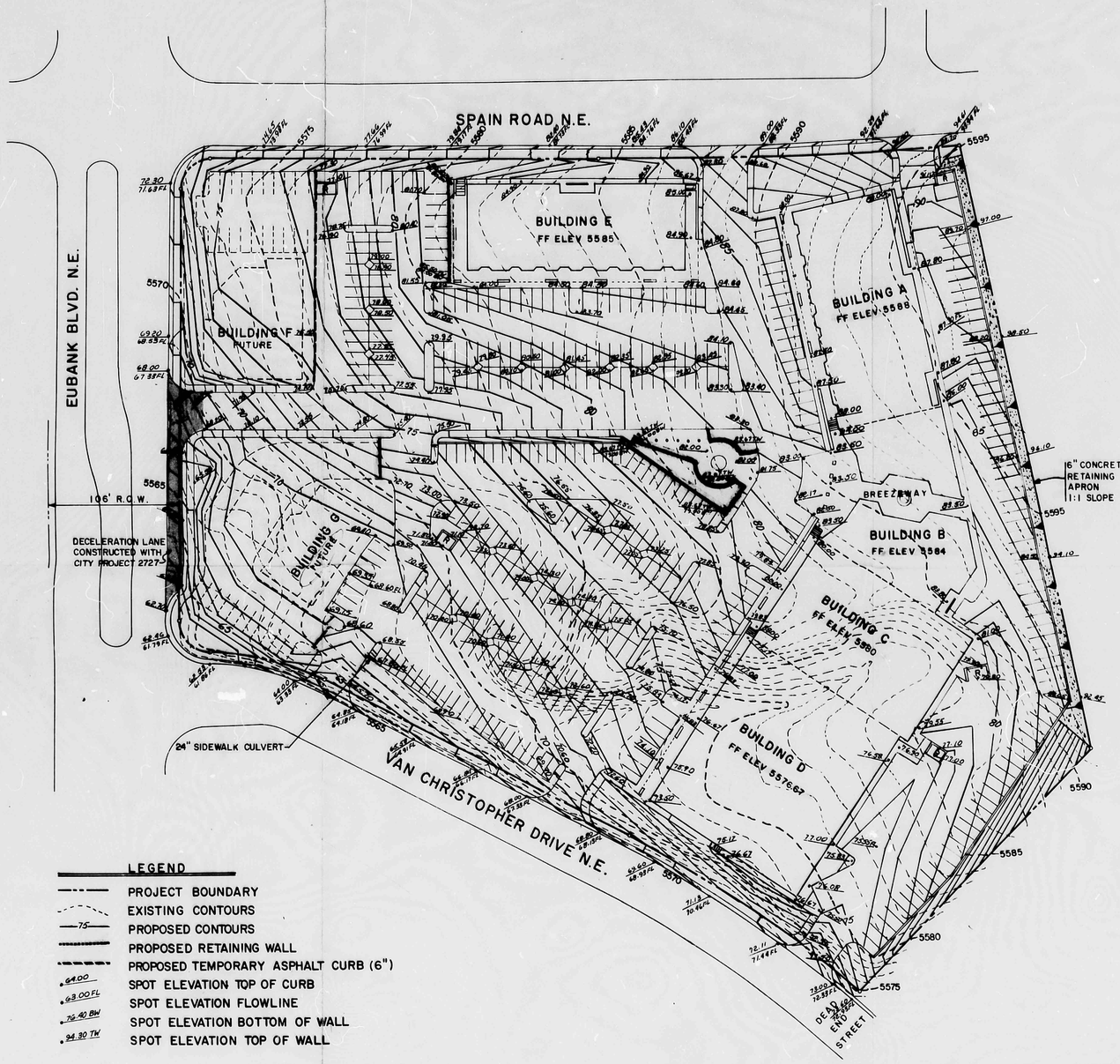
HYDROLOGY

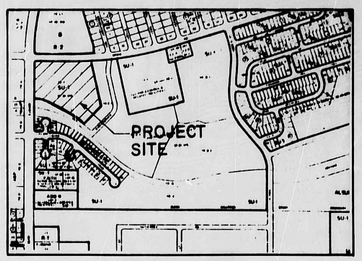
F21/D47

F21/D47

THE PROMENADE

2 PLANS





VICINITY MAP
F-21

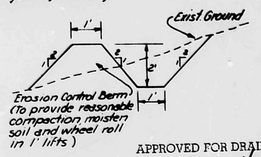
BENCH MARK:
BM 17-F21, INTERSECTION OF EUBANK N.E. AND SPAIN N.E. IN THE NORTHEAST QUADRANT OF THE INTERSECTION. ELEVATION 5573.51 FEET

GRADING NOTES

1. NO FROZEN MATERIALS SHALL BE PLACED IN FILL.
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS PUBLIC WORKS CONSTRUCTION, 1985 EDITION, AND SPECIFICATION FOR EARTHWORK CONTAINED IN THE GEOTECHNICAL INVESTIGATION REPORT FOR THE PROMENADE.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES WITH POTENTIAL CONFLICTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5. SUBGRADE TOLERANCES OF ALL BUILDING PADS, PARKING AREAS, ROADWAYS, DRAINAGE IMPROVEMENTS ETC. SHALL BE ± 0.10 FEET.
6. FINISHED TOP OF ASPHALT TOLERANCE FOR ALL AREAS WITH SLOPES LESS THAN 1% IS ± .02 FEET FINISHED TOP OF ASPHALT TOLERANCE FOR ALL AREAS WITH SLOPES GREATER THAN 1% IS ± .10 FEET.
7. EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL.
8. GRADING AND EARTHWORK OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH ALL CURRENT CITY, COUNTY, STATE AND FEDERAL DUST CONTROL REGULATIONS.
9. DO NOT PUDDLE OR JET BACKFILL.
10. ALL CURBS SHALL BE 6" CONCRETE CURB.

EROSION CONTROL PLAN

A berm with the dimensions shown below along the West and South boundaries (Eubank Blvd. and Van Christopher Dr. respectively) maintained during construction until completion and acceptance of the project by the City.



APPROVED FOR DRAINAGE
1/27/86
DATE
Roger L Green PE Hydrology
SIGNATURE TITLE
ADVISE DRAINAGE INSPECTOR WHEN GRADING EXECUTED

NOTE: AS PER PHONE CONVERSATION WITH ROGER GREEN- EROSION CONTROL PLAN WAS ADDED 12/30/85

F21/D47

ARCHITECT

ENGINEER

1-8-86
1-23-86

Architects - Engineers
VOGT & BYRNES P.A.
1617 University Blvd. N.E., Albuquerque, N.M. 87102 (505) 242-1526

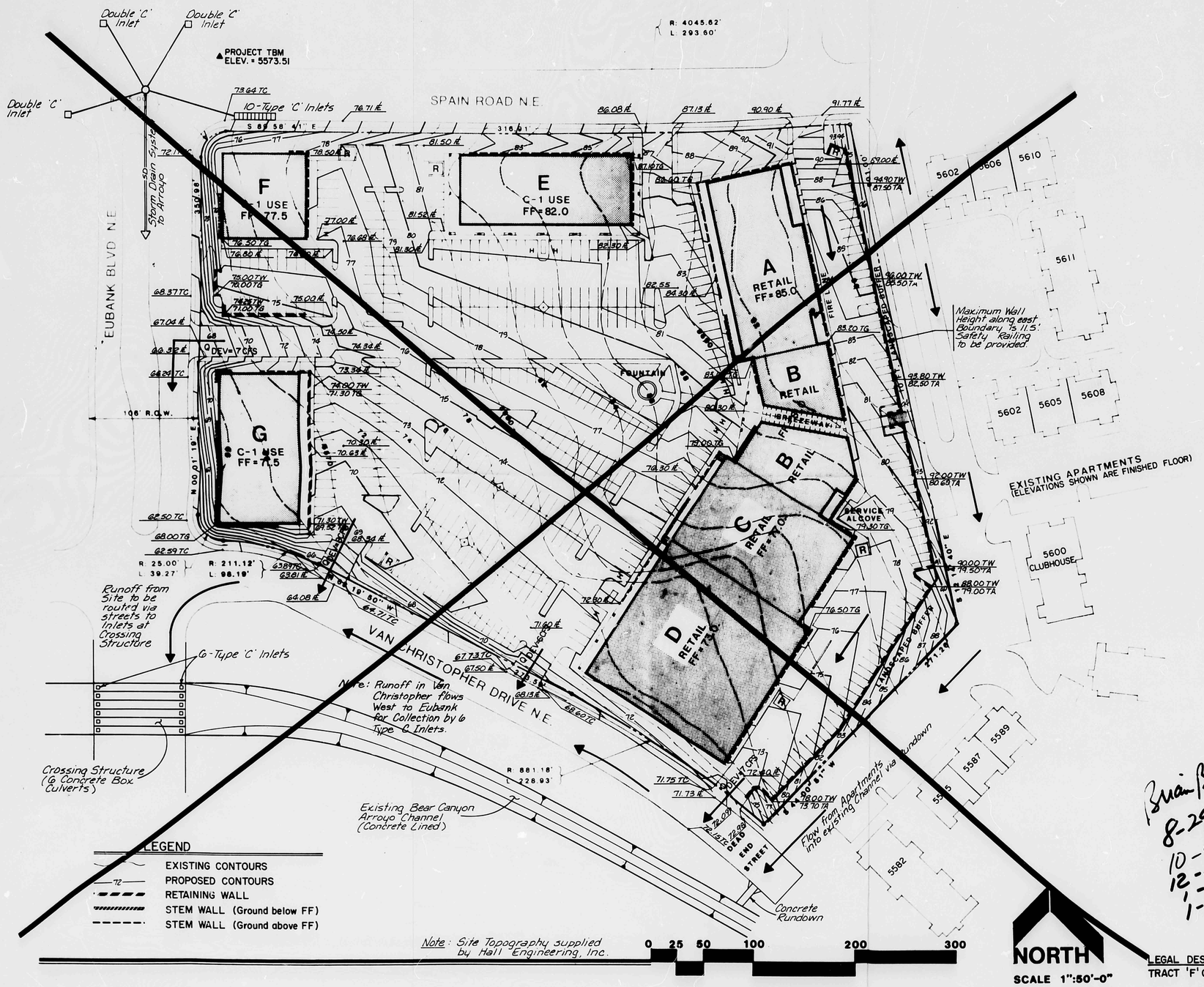
THE PROMENADE
Albuquerque, New Mexico

JOB NO: 8513
DRN BY:
APP'D BY
DATE:

© all rights reserved Vogt & Byrnes P.A.

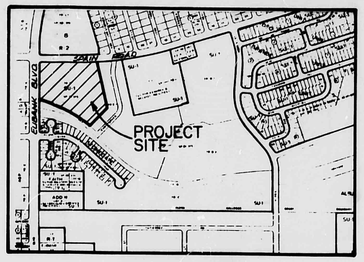
PAGE NO

RECEIVED
JAN 23 1986
HYDROLOGY SECTION



Brian Bennett
8-29-85
10-9-85
12-30-85
1-8-86
1-23-86

LEGAL DESCRIPTION:
TRACT 'F' OSO GRANDE SUBDIVISION



VICINITY MAP
F-21

DRAINAGE/GRADING PLAN
FOR
THE PROMENADE SHOPPING CENTER
AT THE
SOUTHEAST CORNER OF SPAIN ROAD AND EUBANK BOULEVARD

INTRODUCTION

This plan outlines drainage management for an 8.4 acre site located at the southeast corner of Spain Road and Eubank Boulevard. A previous plan (F21-D47) for the site was submitted by Hall Engineering, Inc. on July 12, 1983. Due to a change in ownership and a different thinking regarding building and parking configurations, this new plan is necessary to document recent changes.

The site slopes 3 - 5% in a southwesterly direction. The SCS soil classification for the site is Type "B". Currently, Spain Road, Eubank Boulevard and Van Cristopher Drive border the site on the north, west and south, respectively. The Suncrest Apartments are situated on the site's east boundary.

Other pertinent information includes:

A. Legal Description: Tract F - Oso Grande Subdivision

B. Zoning: SU-1

C. Project Benchmark: BM 17-P21, intersection of Eubank N.E. and Spain N.E. in the northeast quadrant of the intersection. Elevation 5573.51 feet.

EXISTING CONDITIONS

The three streets bordering the site are paved to their full section. Runoff from the apartment complex discharges runoff southward into the concrete lined Bear Canyon Arroyo. Therefore, no off-site runoff impacts the site.

Spain Road and Eubank Boulevard are afforded with an extensive storm drain collection system. At the intersection of Spain Road and Eubank Boulevard, runoff is collected a series of inlets. At the southeast corner of the intersection, a series of 10-Type "C" inlets collect runoff from Spain Road. From this location, runoff is conveyed via a storm drain to the Bear Arroyo, approximately 600 feet south of the intersection.

The Eubank Boulevard crossing structure over the Bear Canyon Arroyo Channel, is constructed with six Type "C" inlets on both sides of the street. These inlets discharge directly into the box culvert crossing structure.

It should be noted that significant storm drainage improvements have been constructed along Spain Road in the watersheds between Eubank Boulevard and Tramway Boulevard. SAD 205 and existing channel and storm drain systems divert flows into the John Robert Dam. Another extensive system, constructed with the Oso Grande Development, directs approximately 250 cfs southward along Morris Avenue into the concrete lined Bear Canyon Arroyo Channel. Runoff generated in the watershed west of Morris Avenue is collected by the Spain Road/Eubank Boulevard system described previously. Overall, runoff in the entire watershed is well managed and provides adequate storm drain protection for the developments and throughfares in this area.

PROPOSED CONDITIONS

Due to the close proximity of the site to the channel and inlets at the crossing structure, it is proposed that runoff be allowed free discharge into Eubank Boulevard and Van Cristopher Drive for collection by the six Type "C" inlets at the Eubank Boulevard channel crossing structure. Intuitively, the peak runoff from the shopping center site will proceed the peak rates generated in the upstream watershed and channel.

Approximately 37 cfs will be generated from this site during the 100-year storm. The following DPM criteria has been utilized to compute this figure:

1. Time of Concentration: 10 minutes
2. "C" Value = .86 (DPM Plate 22.2 C-2, based on 90% impervious)
3. 100-Year rainfall = 2.4" (DPM Plate 22.2 D-1)
4. Intensity = 5.1 in/hr (DPM Plate 22.2 D-1)

This peak value of 37 cfs assumes that the roof areas contribute runoff in a similar manner as the parking lots. In actuality, runoff from the flat roofs will be controlled by downspouts to minimal rates. Since the roof area is approximately 25% of the total site, the peak rate from the site to the downstream system will be more on the order of 28 cfs.

EROSION CONTROL STATEMENT

At all times, the contractor shall promptly clean up any material excavated adjacent to the public right-of-way. A 2' high berm shall be constructed at the site's boundary (along Eubank Boulevard and Van Cristopher Drive) to control sediment runoff.

EXISTING CONDITIONS

Approximately 15 cfs is developed from the site during the 100-year storm. The following DPM criteria were used to calculate this figure:

1. Time of Concentration: 10 minutes
2. "C" Value = .34 (DPM Plate 22.2 C-2, based on 0% impervious)
3. 100-year rainfall = 2.4" (DPM Plate 22.2 D-1)
4. Intensity = 5.1 in/hr (DPM Plate 22.2 D-1)

SUBMISSIONS		
NO.	DATE	DESCRIPTION

URBAN ARCHITECTURE
HOUSTON TEXAS

VOGT & BYRNES, P.A.
ARCHITECTS/ENGINEERS

THE PROMENADE
Albuquerque, N.M.

RECEIVED
JAN 23 1986
HYDROLOGY SECTION

COMMISSION NO.
F21/D47