



VICINITY MAP
ZONE ATLAS PAGE K-14-Z

DRAINAGE MANAGEMENT PLAN

The purpose of this submittal is to present a final grading and drainage plan for the "Arno Lofts" project. This submittal is made in order to support building permit approval.

II. SITE LOCATION AND EXISTING CONDITIONS

The project site is located on the southeast corner of Central and Arno. Prior to demolitions work, the majority of the site contained the Zia Notor Lodge and associated facilities including parking. The site currently drains to the west and to the north into Arno and Central. The total peak discharge from the site in the 100 year storm is approximately 1.35cfs. Site slopes are 2% to 3%. The site is located within zone atlas map # K-14, and hydrologic zone 2.

III. PROPOSED HYDROLOGIC CONDITIONS

The proposed project is to consist of 18 Loft Apartments and a small courtyard area. The site has been divided into two basins for proposed conditions. Basin A consists solely of the main portion of the building (everything from the south edge of the building to the north property line). Basin A is 100% impervious area and generates a peak discharge of 0.77cfs in the 100 year storm. This flow will be discharged to Central Ave via roof drain lines to be daylighted through the face of the curb.

Proposed Basin B consists of the balconies, stair towers, sidewalks and courtyard area behind the building (everything from the south edge of the building to the south property line). Basin B will discharge 0.52cfs to Arno via surface flow during the 100 year storm event. Basin B is 50% impervious, and 25% each of land treatments B & C.

The total discharge to adjacent public streets under proposed conditions is slightly less than existing peak flows.

There are no upstream offsite flows which will impact this site. In addition, the site will not have any detrimental impact on downstream drainage infrastructure since proposed conditions discharge is slightly less than existing.

V. CONCLUSION

The improvements proposed with this final grading and drainage plan are capable of safely passing the 100 year storm and meet city requirements. With this submittal, we are seeking city hydrology approval for building permit.

DRAINAGE CALCULATIONS

EXISTING CONDITIONS: ASSUME 90% D, 5% C, 5% B 0.3 AC * 4.50FS/AC = 1.350FS

PROPOSED CONDITIONS: BASIN "A" (100% D)

0.163 AC * 4.7cfs/AC = 1.77cfs

BASIN "B" (50%D, 25% C, 25% B) 0.141 AC * 3.710FS/AC = 0.520FS

TOTAL PROPOSED = 1.29FS

EXISTING GRADES ALONG THE SOUTH PROPERTY LINE ARE ASSUMED BASED ON SURVEY DATA FOR THE ALLEY AND ARNO ST. AT THE START OF EARTHWORK OPERATIONS, THE CONTRACTOR SHALL VERIF THESE GRADES AND NOTIFY THE ENGINEER OF ANY DISCREPANCY.

BASIS OF ELEVATION for this plan is ACS Control Station 6-K14(R) which is located in the sidewalk in the northeast quadrant of the intersection of Central Avenue and Broadway Boulevard. The mean sea level elevation of said control station = 4968.765.

Bohannan 🛦 Huston 🛮

Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335 ENGINEERING & SPATIAL DATA & ADVANCED TECHNOLOGIES

engineerin

6801 Jefferson NE Suite 100 Albuquerque, NM 87109 505 761-9700 fax 761-4222 dps 🕲 dpsabq.com

ARCHITECT



DESIGN DEVELOPMENT

REVISIONS

DRAWN BY RNB REVIEWED BY DATE 01-27-03

PROJECT NO. DRAWING NAME

ARNO LOFTS GRADING, DRAINAGE, & UTILITY PLAN

SHEET NO.