

VICINITY MAP

K09

DRAINAGE ANALYSIS

LEGAL: Lot 22-A, Block 8, Original Townsite of Westland

AREA: 1.6706 acres (72,770 SF)

BENCHMARK: ACS brass disk "12-K9" ELEV= 5219.837 (NAVD 1988)

TBM: Top back of street curb opposite SW property corner of the site. ELEV= 5174.71 (NAVD 1988)

SURVEYOR: The Survey Office dated December, 2017

FLOOD HAZARD: From FEMA Panel 35001C0328J (11/14/2016), this site is identified as being within Zone 'X' which is outside the 0.2% annual chance floodplain.

EXISTING CONDITIONS: The site is undeveloped and slopes down from the northwest to the southeast at 2%. It is bounded on the west by 94th Street, on the north by Volcano Road, on the east by a CMU wall, and on the south by a developed Century Link facility. The site discharges to the Century Link parcel.

FIRST FLUSH: Q=(0.44-0.10)(15,500)/12= 439 CF

This volume will be provided in the detention pond located at the SE corner of the site as the storage depth of 0.15' provides 600 CF storage volume.

OFFSITE FLOWS: A portion of the adjacent 94th Street R/W discharges to the site, but the proposed street curb will divert the offsite runoff to existing inlets on 94th Street located south of the site.

PROPOSED IMPROVEMENTS: The proposed development includes an office and shop buildings. A covered parking area, covered shade structure, and future residence are also included in the impervious area calculations.

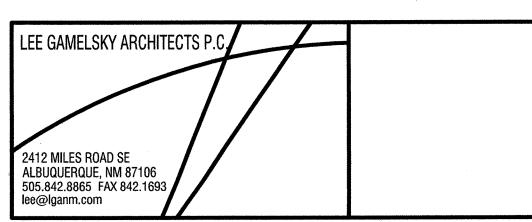
DRAINAGE APPROACH: The proposed drainage plan will follow historic flow paths. Building roof runoff will discharge to the east and south sides of the buildings. Site runoff will be carried overland to the SE corner. The proposed pond will contain the 10-day storage volume.

HYDROLOGY: For precipitation Zone 1 with 100% B land treatment Existing Q=(2.03)(1.67)=3.4 CFS

The proposed buildings and walks are 21% of the area with the balance of the site either base course or undeveloped considered as land treatment type 'C'. Proposed Q = (1.31)(2.87)+(0.36)(4.37) = 5.3 CFS

The V100 = (57,270)(.0825)+(15,500)(.1642) = 7,270 CF The V 10-day = 7,270 + (15,500)(.1225) = 9,170 CF

The retention pond volume provided is 9,200 CF at 2.1' depth



L&C TRANSPORT OFFICE AND SHOP
Albuquerque, New Mexico

PROJECT ARCHITECT: Project #:

LEE GAMELSKY, AIA Date: 19 MARCH 2018

CONCEPTUAL GRADING PLAN

