

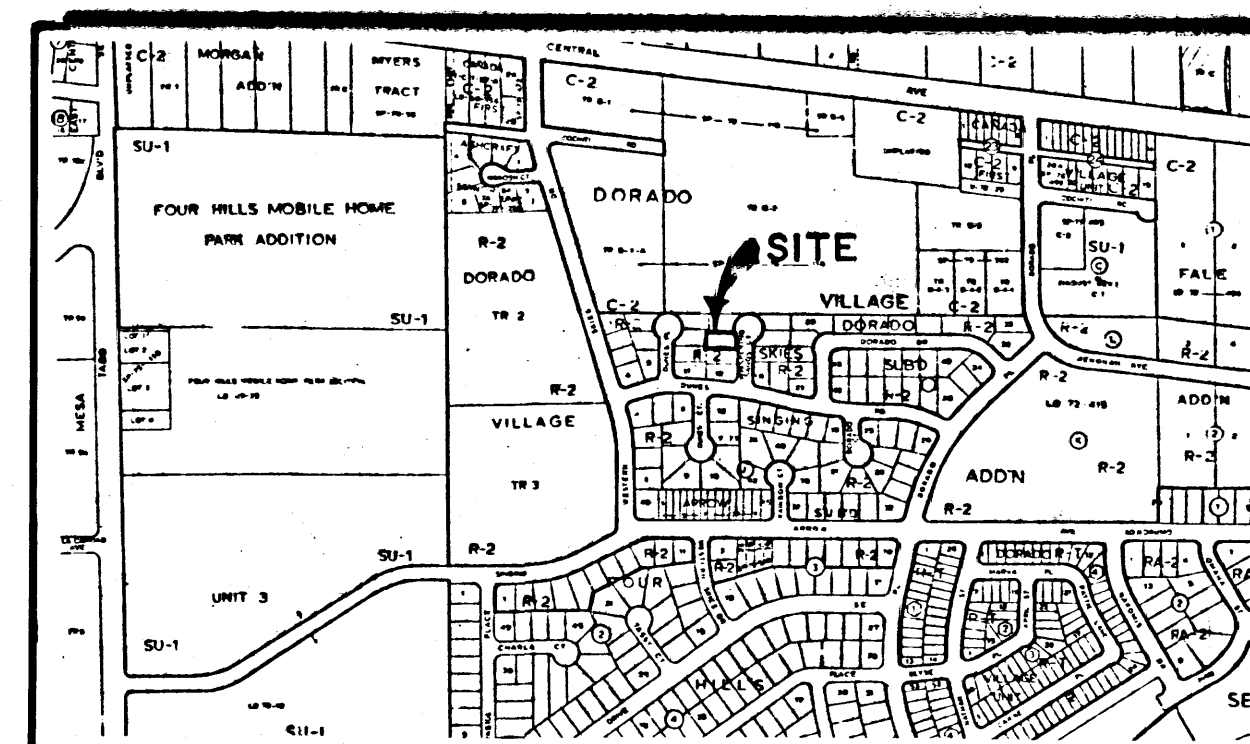
WHISPERING SANDS COURT S.E.

LEGEND

	SIDEWALK, CURB & GUTTER (EXISTING, PROPOSED)
	PROPOSED ASPHALT
	BUILDING (EXISTING, PROPOSED)
	PROPERTY LINE
	EXISTING SPOT ELEVATION
	EXISTING CONTOUR
	PROPOSED SPOT ELEVATION
	PROPOSED CONTOUR
	SURFACE FLOW DIRECTION (EXISTING, PROPOSED)
	L.A. LANDSCAPED AREA
	T.G.W. TOP OF GRADE WALL (LESS THAN 18" HIGH)
	T.R.W. TOP OF RETAINING WALL (MORE THAN 18" HIGH)
	T.A. TOP OF ASPHALT
	T.C. TOP OF CURB
	F.L. FLOW LINE
	F.F. FINISHED FLOOR

CONSTRUCTION NOTES:

- Before construction, the Contractor shall check and verify pertinent figures shown herein and shall make all applicable field measurements. Should any conflict, error or discrepancy be discovered, the contractor shall notify the Engineer at once to resolve the problem. It is recommended that the Contractor meet with the Engineer for a pre-design conference to discuss the scope of work and critical areas involved.
- The Contractor shall be responsible for following the plans using his best skill and attention. Any departure from the plans must be approved by the Engineer and the City Hydrology Department prior to construction.
- The Contractor shall check the site plan for locations of existing utilities within or adjacent to streets and shall take all necessary precautions and efforts to locate and protect these utilities. He shall give 48 hours notice to Line Locating Service, 765-1234, for any work that may interfere with said utilities.



VICINITY MAP L22

SCOPE:

The proposed improvements, comprised of a 4-plex unit, walks and associated paved parking, is located in an established multi-family development. This lot is one of the few remaining undeveloped sites in the subdivision. All subdivision improvements are in place, such as the adjacent street and storm drainage system.

The present site is surrounded on all sides by existing development. The lot drains to the front, to a cul-de-sac street. The street drains to the north to an existing storm drain system which disposes of all flows entering the cul-de-sac.

The intent of this plan is to show:

- Grading relationships between the existing ground elevations and proposed finished elevations in order to facilitate positive drainage to designated discharge points.
- The extent of proposed site improvements, including buildings, walks and pavement.
- The flow rate/volume of rainfall runoff across or around these improvements and methods of handling these flows to meet City requirements for drainage management.
- The relationship of onsite improvements with existing neighboring property to insure an orderly transition between proposed and surrounding grades.

GENERAL NOTES:

LEGAL: Lot 14, Dorado Skies, Albuquerque, New Mexico

SURVEYOR: Ron Forstbauer Surveying Co., February 19, 1985

B.M.: B.C. 2-L22, Central & Traway, Elev. 5659.96

T.B.M.: South Lot line projection to curb, T.C. Elevation 5575.14

SOILS: SCS Soils Map #32, Soil Type TgB, Hydrologic Group 'B'.

FLOOD HAZARD: Site is not located within a flood hazard area. (FIMA Plate No. 37)

OFF-SITE DRAINAGE: Site is isolated from offsite drainage due to presence of existing street on the east and developed lots on the north and south. Land falls away to the west.

EROSION CONTROL: If site is constructed with no stockpiled fill material, no erosion control will be necessary. If fill is stockpiled, contractor will be responsible for constructing a silt fence along east PL during construction to control sediment runoff.

CALCULATIONS:

Based on a pre-design meeting with City of Albuquerque Hydrology, on 2-21-85, the following criteria was established.

- Comply with previously approved Master Plan which calls for each lot to hold flows for controlled release on to the street.

Calculations are based on the City of Albuquerque D.P.M. Manual, Vol. II for the 100 year-6 hour storm, using the Rational Formula to compare the existing and proposed runoff rates.

NATIONAL METHOD- Q = CIA

Area of site: 6882 sq.ft. = 0.158 Ac.

Run-off Coefficient:

Existing Site:

A imp. = 0 Ac

I imp. = 0.1

C_u = 0.34 (DPM 22.2 C-1)

Developed Site:

A imp. = 0.11 Ac

I imp. = 0.3

C_u = 0.71 (DPM 22.2 C-1)

Rainfall Intensity:

I = P₆ (6.84) T_c^{-0.51} 3.18" per hour

where P₆ = 2.45" (DPM 22.2 D-1)

T_c = 10 minutes

Existing Condition:

Q₁₀₀ = (0.34)(5.18)(0.158)

= 0.3 cfs

Q₁₀₀ = (0.3)(5 T_c)(60 sec/10)/2

= 417 cu. ft.

Developed Condition:

Q₁₀₀ = (0.71)(5.18)(0.158)

= 0.6 cfs

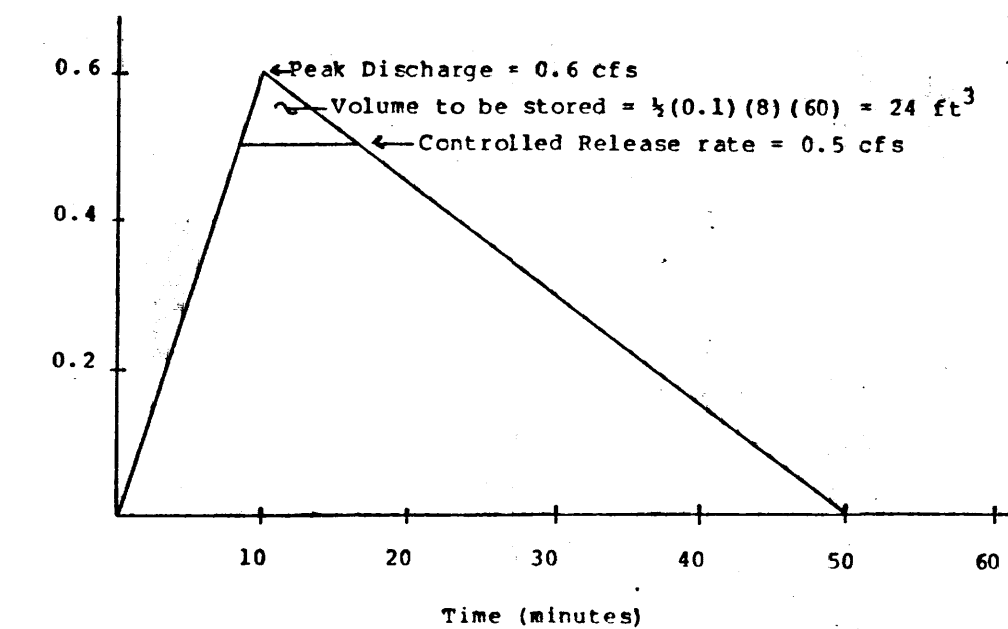
Q₁₀₀ = (0.6)(50)(60)/2

= 872 cu. ft.

SUMMARY:

Q₁₀₀ = (0.3)-(0.6) = 0.3 cfs (increase)

V₁₀₀ = (417)-(872) = 455 cu. ft. (increase)

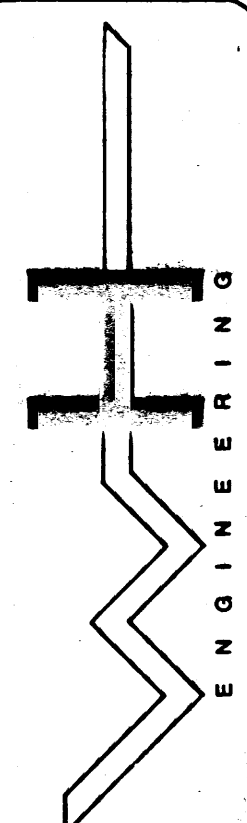


As can be shown, the amount of detained volume is insignificant for the standard release rate of 0.5 cfs. In light of the following background, it is proposed to drain all of the flows generated by impervious surfaces directly to the street.

- Rainfall falling into the rear yard will be retained on site.
- The site will discharge to a 24" RCP storm sewer located at the end of the cul-de-sac. This storm sewer drains the northern portion of Dorado Skies. In particular, the storm sewer has capacity to accept all flows from this sub-basin regardless of the times to peak in that the cul-de-sac acts as a large detention pond.
- This lot is the last one to be developed on the cul-de-sac and can be considered an in-fill lot.
- Drainage patterns on the remaining lots surrounding the cul-de-sac are split between free discharge to the street and ponding. Considering that several of the ponds were in varying stages of disrepair to question their effectiveness to control runoff, it remains doubtful that a pond on this site would do little to influence the drainage patterns of the sub-basin.

RECEIVED
FEB 28 1985
HYDROLOGY SECTION

DRAINAGE / GRADING PLAN SCOTT FOURPLEXES



CHRISTOPHER R. SCOTT
REGISTERED PROFESSIONAL ENGINEER
STATE OF NEW MEXICO
SHEET 1 OF 1

WEISS-HINES ENGINEERING INC.
1100 ALVARADO N.E. SUITE B
ALBUQUERQUE, NEW MEXICO 87110
(505) 266-3444

REVISIONS
DATE
DESIGNED C.W. 2-85
DRAWN C.W. 2-85
CHECKED C.W. 2-85